

BOROUGH OF TORQUAY.



ANNUAL REPORT

OF THE

Medical Officer of Health,

FOR THE YEAR 1910,

BY

THOMAS DUNLOP, M.B., C.M., D.P.H.,

TOGETHER WITH THE

Annual Reports of the Sanitary Inspectors

AND THE

Report of the Borough Meteorologist.

BOROUGH OF TORQUAY, 1910.

Area of the Borough, 3,858 acres.

Rateable value, £192,000.

Population—Census (1901), 33,625 ; estimated at the middle of 1910, 34,150.

Number of inhabited houses—Census (1901), 6,614.

Average number of persons per house, 5.

Density of population, 8·7 persons per acre.

Crude death rate, 1910, 15·1 per 1,000. Average for previous ten years, 14·6 per 1,000.

Corrected death rate, 1910, 15·8 per 1,000. Average for previous ten years, 14·5 per 1,000.

Death rate if all visitors excluded, 14·7 per 1,000.

Birth rate, 15·8 per 1,000. Average for previous ten years, 16·1 per 1,000.

Infantile mortality, 1910, 98·3 Average for previous ten years, 115.

Death rate from zymotic diseases, 43 per 1,000.

Mean annual temperature, 51·5.

Hours of Bright Sunshine recorded, 1771.

Total Rainfall, 38·7 inches.



Borough of Torquay.

ANNUAL REPORT

OF THE

Medical Officer of Health

For 1910.

*To His Worship the Mayor, and to the Aldermen and Councillors
of the Borough of Torquay*

GENTLEMEN,

I beg to present my eighth Annual Report on the health of the inhabitants, and the sanitary circumstances of the Borough of Torquay. The report also contains details of the administration of the Factory and Workshops Act as required by the Secretary of State for the Home Department.

The Medical Inspection of school children has been carried out according to the instructions of the Board of Education. This is dealt with in a separate report.

The death rate was equal to 15·8 per 1,000 of the population, being 1·3 per 1,000 higher than the average of the past ten years. The infantile mortality—100 per 1,000 births—is slightly higher than that for last year, which was 92, but considerably less than the ten years' average of 115. The birth rate was 15·8 per 1,000, or ·3 less than the average for ten years. The zymotic death rate was only ·45 per 1,000, which is satisfactory.

I have to thank the members of the Sanitary Committee and of the Town Council for their kindness and support throughout the year, also the Chief Officers of the Borough and Inspectors for their ever-ready assistance.

I am, Gentlemen,

Your obedient servant,

THOMAS DUNLOP.

THE BOROUGH.

The Borough of Torquay is formed by the civil parishes of St. Mary-Church and Tormoham. The total area of the Borough is 3,858 acres. It is divided into nine wards, which, with their populations, according to the 1901 census, are as follows :—

| | | | | |
|-----------------|----|----|----|--------|
| Torre | .. | .. | .. | 3851 |
| Waldon | .. | .. | .. | 3576 |
| Upton | .. | .. | .. | 4339 |
| Ellacombe | .. | .. | .. | 5911 |
| Strand | .. | .. | .. | 3129 |
| Torwood | .. | .. | .. | 3644 |
| St. Mary-Church | .. | .. | .. | 3312 |
| Babbacombe | .. | .. | .. | 3264 |
| Chelston | .. | .. | .. | 2599 |
| | | | | <hr/> |
| The Borough | .. | .. | .. | 33,625 |

For the purpose of Sanitary administration, the Borough is divided into three districts, in each of which a Sanitary Inspector has full charge, under the Medical Officer of Health.

No. 1 District.—The whole of the Chelston, Torre, and Waldon Wards, that portion of the Strand Ward on the west side of Fleet Street, and that portion of Upton Ward on the west side of Union Street ; under the supervision of Mr. MacMahon.

No. 2 District.—The whole of the Torwood Ward, that portion of the Strand Ward on the east side of Fleet Street, the whole of Ellacombe Ward, and that portion of the Upton Ward on the east side of Union Street ; under the supervision of Mr. Watson, who is also Port Sanitary Inspector.

No. 3 District.—The whole of the St. Mary-Church and Babbacombe Wards ; under the supervision of Mr. Body.

Mr. Body has also the work of Inspections under the Factory and Workshop Acts under him ; and during the past year has had the supervision of the Slaughter Houses and the Inspection of Meat in the whole District.

The principal public Institutions from a Sanitary point of view are—

The Torbay Hospital in the Upton Ward.

The Western Hospital for Consumptives, and the Rosehill Children's Hospital in the Strand Ward.

Smyrna, or the Mildmay Consumptive Home, in the Ellacombe Ward.

St. Barnabas', St. Luke's, St. Raphael's, and Erith House, all Consumptive Homes, situated in the Torwood Ward.

The Borough Sanatorium for infectious diseases is situated on the Newton Abbot Road, just outside the Borough boundary, in the Newton Abbot Rural District. The Corporation possess another Isolation Hospital, also situated outside the boundary, about half-a-mile from the village of Cockington.

PHYSICAL FEATURES AND GENERAL CHARACTER OF THE DISTRICT.

These are of a highly diversified character, especially the Central portions forming the Torquay promontory. In this district the two principal heights are the Warberry, 448 feet, and the Lincombe Hills, 372 feet, forming long ridges running N.E. and S.W., which are composed of the Lower Devonian grits and slates. The lesser heights, such as the Braddons, Waldon Park, and Chapel Hill, are formed of Middle Devonian limestone, which rests above the grits and slates mentioned.

On each side of this central area, viz., at St. Mary-Church and Chelston, rocks higher in the Geological scale for the most part prevail. These rocks belong to the Permian formation, and consist of beds of Breccia—a kind of conglomerate—and sandstones of a deep red colour, owing to the presence of peroxide of iron.

There is very little clay in any portion of the area, and what does occur is of the nature of marl, and is confined to the lower levels of certain valleys or depressions, so that rain is not detained on the surface, as it rapidly disappears through these rather pervious rocks and soils.

METEOROLOGY.

Full details of the Meteorology of the Borough will be seen in the appended Annual Report of Mr. F. March, F.R. Met. Soc., M.P.S., Borough Meteorologist ; but the following resumé of the climatic conditions may be of interest :—

| | 1906. | 1907. | 1908. | 1909. | 1910. |
|---|--------|--------|--------|--------|-------|
| Highest Maximum Temperature .. | 76°·1 | 77°·3 | 78°·2 | 81·9 | 75·1 |
| Lowest Minimum ,, .. | 26°·8 | 24°·6 | 23°·4 | 24·9 | 23·7 |
| Mean Maximum ,, .. | 57°·3 | 56°·3 | 57°·9 | 56·4 | 57·0 |
| Mean Minimum . ,, .. | 45°·9 | 55°·4 | 46°·2 | 44·7 | 45·9 |
| Mean of Maximum and Minimum | 51°·6 | 50°·9 | 52°·1 | 50·6 | 51·5 |
| Difference from average .. | ·4 | ·3 | +0·9 | —·6 | +0·3 |
| Number of days on which rain fell | 170 | 199 | 173 | 169 | 216 |
| Total fall in inches | 28·53 | 33·22 | 28·24 | 33·78 | 38·70 |
| Number of hours of bright sunshine | 2026·3 | 1741·1 | 1786·2 | 1935·7 | 1771 |

THE CLIMATE OF TORQUAY.

The winter climate of Torquay may be described as mild and equable. By comparative tables of recorded temperatures, "The Lancet" has again and again demonstrated that although the mean temperature of Foreign Health Resorts, such as Nice and Florence, is somewhat higher than that of Torquay, yet the nights here are just as warm as those in the resorts mentioned. The main feature, however, is the large amount of sunshine experienced during the winter months. Other beneficial factors are freeness from fogs and the dryness of the air.

The benefit of living under such climatic conditions must be apparent to all, but it is inestimable to those who are asthmatical, or who are sufferers from chronic bronchitis. To the aged and infirm, who are extremely sensitive to every change of temperature, life under such conditions is prolonged and made worth living. The bright sunshine and the possibility of being constantly in the open air are most advantageous to children, and those who are delicate have every chance of growing up strong and healthy.

It hardly appears necessary to again refute the fiction that Torquay is unbearably hot in summer. During the hottest days it has been found invariably that the maximum temperature here is some five to ten degrees lower than those recorded in London and the Midlands. To a great extent this is due to the fact that

Torquay is situated on a promontory, thus being flanked on two sides by the sea, while to the north-west is Dartmoor, so that it is constantly fanned by cool breezes from one or other direction. It seems difficult to imagine a more delightful spot to spend a holiday in. Boating, bathing, and fishing of the best, while in the neighbourhood are innumerable places of beauty and interest, which are easily accessible by sea, coach, or rail. These facts are amply proved by the constantly increasing number of visitors who year after year spend their summer holidays here.

WATER SUPPLY.

The water supply of Torquay is derived from an upland surface gathering ground about fifteen miles from Torquay, on the borders of Dartmoor. The area of the gathering ground is about 2,241 acres, and is composed of:—

| | | | | Acres. |
|------------------------|----|----|----|--------|
| Moorland .. | .. | .. | .. | 572 |
| Woods .. | .. | .. | .. | 75 |
| Woods (new) | .. | .. | .. | 42 |
| Land within zone .. | .. | .. | .. | 350 |
| Land under cultivation | | .. | .. | 212 |
| Grazing .. | .. | .. | .. | 990 |
| Total .. | | | | 2,241 |

The water is stored in three large reservoirs—the Tottiford, 103,000,000 galls.; the Kennick, 194,000,000; and the Trenchford, 171,000,000.

As stated in previous reports, the Corporation are owners of the whole watershed, and now there are no farms or inhabited buildings on the area, so that there can be no danger from what would otherwise be a constant menace to the purity of the water.

The work of narrowing the zone fences and making them of a more permanent nature has been continued throughout the year, so that now, almost all the springs, streams, etc., have been completely protected. The system of deep trenching the boggy land adjacent to the streams is having a very beneficial effect. Many small springs have been tapped, thus allowing the water to flow direct into the streams, without lying in contact and absorbing the peaty matter in the ground, as before. In order to obviate the slight flat taste noticeable in the water from the Kennick

reservoir during the summer months, when, on account of the large consumption of water, it is necessary to send the water home direct under pressure. Mr. Chapman has designed an aerator which has been put down close to the Kennick reservoir. This only necessitates a very slight loss of pressure, but improves the appearance and taste of the water considerably.

The rainfall at the various stations on the watershed is as follows :—

| | | 1906. | 1907. | 1908. | 1909. | 1910. |
|---------------|----|-------|-------|-------|-------|-------|
| Kennick | .. | 34·84 | 41·66 | 31·88 | 41·24 | 54·44 |
| Mardon | .. | 35·28 | 41·03 | 32·32 | 41·91 | 56·93 |
| Blackingstone | .. | — | 44·68 | 33·63 | 42·82 | 59·26 |
| Laployd | .. | 29·51 | 36·48 | 26·37 | 34·43 | 39·02 |
| Bullaton | .. | 39·03 | 42·59 | 33·68 | 42·17 | 57·16 |

The average over the whole watershed is 55·6 inches, or 15·09 inches more than in 1909. The average amount of evaporation over a water area of about 83 acres was 18·13 inches, against 17·31 in 1909.

The water supply is continuous, and the average amount used for all purposes was 35 gallons per head per day.

QUALITY OF THE WATER.

Professor Percy Franklin, after visiting the gathering ground and examining samples of the water, both chemically and bacteriologically, reported as follows :—

“A source of water supply which, in respect of freedom from suspicion, ranks with the best upland surface supplies in the Kingdom. The water also contains such a small amount of lime and magnesia salts that it possesses all the well-known advantages of very soft water, whilst its slightly alkaline reaction prevents it from having any solvent power on lead.”

The result of analysis show that the quality of the water keeps at a high standard of purity. The following results of a recent analysis are typical :—

PHYSICAL CHARACTERS.

| | | | |
|-----------|----|----|--|
| Colour | .. | .. | Slightly brownish yellow |
| Turbidity | .. | .. | Cloudy |
| Odour | .. | .. | None |
| Deposit | .. | .. | A very minute amount of vegetable debris |

CHEMICAL RESULTS.

| | Expressed in parts per 100,000. | | | | |
|--------------------------------------|---------------------------------|----|----|----|-------|
| Total solids | .. | .. | .. | .. | 7·6 |
| Chloride | .. | .. | .. | .. | 1·6 |
| Hardness | .. | .. | .. | .. | 2·3 |
| Nitrites | .. | .. | .. | .. | nil |
| Nitrates | .. | .. | .. | .. | ·08 |
| Free Ammonia | .. | .. | .. | .. | ·0000 |
| Organic Ammonia | .. | .. | .. | .. | ·0104 |
| Oxygen absorbed in 4 hours at 80° F. | | | | .. | ·071 |
| Poisonous metals | .. | .. | .. | .. | nil |

From an examination of the above results and a knowledge of the gathering ground, I have no hesitation in classifying this water as an excellent one for all domestic purposes.

SEWERAGE.

The sewage of the whole district, and most of the storm-water, is conveyed to the main sewer in Fleet Street. That of the low-level system, which comprises the area covered by the Strand, Torbay Road, Vaughan Parade, Victoria Parade, Beacon Hill, George Street, and Swan Street, being pumped into the main sewer by means of automatic hydraulic pumps. The main sewer is seven feet in diameter, and runs from Fleet Street to Hope's Nose, a distance of almost two miles. The outfall is at such a level that the sewage is discharged at all states of the tide. No method of treatment is adopted, as the flow of current is out towards mid-channel beyond Berry Head, and does not under any circumstances return towards the bay.

New sewers of varying lengths have been laid in Happaway Road, Clenan Lane, Barton Road, and Teignmouth Road, principally to drain new houses in the Barton area, which is now being opened out for building purposes.

COLLECTION AND DISPOSAL OF REFUSE.

In many parts of the town, principally those occupied by members of the working classes, house refuse is stored in receptacles of varying sizes, shape and condition, the result being, that when these are put out at the road-side to await the call of the scavengers, the contents are frequently tipped out or are scattered about by dogs searching for food. If there is any doubt about

this being unhealthy, there can be none about its being unsightly. My attention is often drawn to this by visitors who consider it one great blot in our sanitary administration. Fortunately, now, all new houses erected must possess proper covered sanitary ash bins before being granted a habitation certificate ; also, where possible, as for instance in houses where infectious illness occurs, or where home work is done, an endeavour is made to compel owners to provide sanitary ash receptacles.

House refuse is removed by the employées of the Corporation, under the Surveyor's Department. In most parts of the town it is removed once a week, but in certain parts twice. It is carted to the destructor works in Upton Valley, and there consumed, about 12,000 tons being dealt with annually. The destructor is a "Warner Perfectus" of four cells. The boilers are heated from the furnaces, and the steam generated can be used to drive donkey-engine, vertical engine for running blower, 25-horse power engine for running mortar mill and electrical installation. The clinker produced is ground and used for mortar ; for this there is a good demand.

POPULATION.

The population of the Borough at the 1901 census was found to be 33,625, of whom 13,339 were males and 20,286 females ; the number of inhabited houses being 6,614, and the average number of persons per house was five.

As this is the last year of the intercensal period, it is most difficult to estimate with any accuracy the population of the Borough. Fortunately, next year, we will have correct figures to work with. From the number of new houses erected during recent years (some seventy being passed for habitation in 1910) I consider the increase higher than that estimated, which I put down as 34,150, or fifty more than for last year. This figure has been used in compiling the year's statistics.

It is necessary, in preparing statistics and comparing the various death rates of Torquay with those of the whole country, to consider the age and sex distribution of the population. The population of a district, in which the proportion of males to females, or of young persons to old persons, are different to those of the country generally, will suffer more than the whole country from the diseases which particularly affect persons of the age and

sex which predominate in the district. In order to insure a just comparison between the death-rate of such a district and the country as a whole, it is necessary to raise or lower the gross death-rate of the district to what they would be if the proportions of the local population in respect of age and sex were the same as those in the country generally.

As Torquay has a much larger proportion of females to males in its population, and of people at advanced ages, than that of England and Wales, I have calculated a factor by which all Torquay rates have to be multiplied to compare them with those of the whole country. This factor is $\cdot 8044$.

BIRTHS.

The total births registered during the year was 539—males, 285 ; females, 254 ; being thirty-six less than in 1909, and six less than the average of ten years. Of the 539 births, twenty-three were illegitimate.

The numbers registered in each quarter of the year were as follows :—

| | | | | |
|-------------|----|----|----|-----|
| 1st quarter | .. | .. | .. | 133 |
| 2nd | „ | .. | .. | 141 |
| 3rd | „ | .. | .. | 140 |
| 4th | „ | .. | .. | 125 |
| Total | .. | .. | .. | 539 |

The following table gives the total births and the birth-rates for the past ten years compared with those for England and Wales.

| Years. | Number of Births. | Torquay Birth Rate, per 1,000 living. | England & Wales Birth Rate, per 1,000 living. |
|--------|-------------------|--|---|
| 1900 | 559 | 16.6 | 28.9 |
| 1901 | 556 | 16.5 | 28.5 |
| 1902 | 540 | 16.0 | 28.6 |
| 1903 | 536 | 15.9 | 28.4 |
| 1904 | 530 | 15.7 | 27.9 |
| 1905 | 522 | 15.4 | 27.2 |
| 1906 | 566 | 16.6 | 27.0 |
| 1907 | 537 | 15.8 | 26.3 |
| 1908 | 524 | 15.4 | 26.5 |
| 1909 | 575 | 16.8 | 25.6 |
| 1910 | 539 | 15.8 | 24.8 |

In comparing the birth-rate of Torquay with other towns, we must bear in mind the constitution of the population. Here we have a large excess of females over males, a large proportion of the females are spinsters, and some 40% are either above or below the child-bearing age. In the face of such facts, it is unreasonable to expect anything but a low birth-rate.

VACCINATION.

Through the courtesy of Mr. Edwards, the Vaccination Officer, I am able to give the results of primary vaccination for the years from 1897 to 1909.

| Year. | Total births registered | Successfully vaccinated | Insusceptible of Vaccination | Had Small-pox | Number of Certificates from Conscientious Objectors | Died Unvaccinated | Postponed by Medical Certificate | Removed to other districts the Vaccination Officer of which has been appraised | Removed Address unknown | Percentage successfully Vaccinated | Excluding those who died Unvaccinated. Percentage |
|-------|-------------------------|-------------------------|------------------------------|---------------|---|-------------------|----------------------------------|--|-------------------------|------------------------------------|---|
| | | | | | | | | | | % | % |
| 1897 | 683 | 581 | 2 | — | — | 59 | — | 4 | 20 | 85 | 93 |
| 1898 | 664 | 544 | 2 | — | 10 | 64 | 6 | 7 | 25 | 82 | 90 |
| 1899 | 612 | 505 | 6 | — | 14 | 67 | 6 | 3 | 11 | 83 | 93 |
| 1900 | 596 | 502 | 1 | — | 15 | 47 | 7 | 3 | 21 | 84 | 91 |
| 1901 | 597 | 491 | 2 | — | 16 | 57 | 13 | 1 | 17 | 82 | 91 |
| 1902 | 579 | 488 | 2 | — | 8 | 61 | 4 | 4 | 8 | 84 | 92 |
| 1903 | 565 | 508 | 2 | — | 14 | 34 | 1 | 3 | 3 | 90 | 95 |
| 1904 | 564 | 476 | — | — | 20 | 49 | 3 | 6 | 8 | 84 | 92 |
| 1905 | 561 | 504 | — | — | 16 | 30 | 5 | 2 | 4 | 90 | 94 |
| 1906 | 591 | 501 | 1 | — | 25 | 47 | 5 | 2 | 8 | 84 | 92 |
| 1907 | 582 | 447 | 2 | — | 41 | 39 | 5 | 4 | 13 | 76 | 82 |
| 1908 | 546 | 394 | — | — | 83 | 48 | 8 | 4 | 9 | 72 | 80 |
| 1909 | 596 | 370 | 3 | — | 158 | 37 | 12 | 1 | 11 | 62 | 66 |

NOTE.—These are the figures for the Torquay Registration Sub District.

In my last two reports I have drawn attention to the great increase in the number of exemptions from vaccination granted. There can be no doubt that this is attributable to the Order of the Local Government Board, requiring Vaccination Officers to notify

parents, when the child attains the age of three months, that they have only one month left in which to secure an exemption. In 1907, when the order first took effect, the number of our exemptions increased from 25 to 41 ; in 1908 this increased to 83 ; and in 1909, this figure was practically doubled, being 158. What is obtaining here is the same as in other sanitary areas, so that the result is that a large and increasing percentage of the population of the country are unprotected from small-pox, so that when that disease makes its appearance, as it assuredly will, it will probably assume the virulent type seen during the last century. The effect of such an epidemic is staggering to think of and, doubtless, the cost to the community will be prodigious.

INFECTIOUS DISEASES.

Under the Torquay Harbour and District Act, 1886, provision was made for the compulsory notification of the dangerous infectious diseases. It also contained similar clauses to those in the Infectious Diseases Prevention Act, 1890, which rendered its adoption unnecessary.

NOTIFICATIONS.

During the year, 123 cases of infectious diseases were notified.

The following table shows the number of cases of the various diseases compared with those notified during the past five years :—

| Notifiable Disease. | 1910. | 1909. | 1908. | 1907. | 1906 |
|---------------------|-------|-------|-------|-------|------|
| Small-pox | — | — | — | — | — |
| Cholera | — | — | — | — | — |
| Diphtheria | 58 | 61 | 99 | 14 | 2 |
| Membranous croup | — | — | — | — | — |
| Erysipelas | 6 | 5 | 3 | 9 | 2 |
| Scarlet fever .. | 58 | 73 | 114 | 53 | 34 |
| Typhus fever .. | — | — | — | — | — |
| Enteric fever .. | 1 | 4 | 16 | 10 | 11 |
| Relapsing fever .. | — | — | — | — | — |
| Continued fever .. | — | — | — | — | — |
| Puerperal fever .. | — | — | — | 1 | — |
| Plague | — | — | — | — | — |
| Totals .. | 123 | 143 | 232 | 87 | 49 |

The following table gives the notifications during each month of 1910 :—

| | Small-pox. | Diphtheria and Membranous Croup. | Enteric Fever. | Puerperal Fever. | Scarlet Fever. | Erysipelas. | Chicken-pox | Total. |
|--------------|------------|---|----------------|---------------------|----------------|-------------|-------------|--------|
| January .. | — | 4 | — | — | 6 | — | — | 10 |
| February .. | — | 5 | 1 | — | 5 | — | — | 11 |
| March .. | — | — | — | — | 4 | 1 | — | 5 |
| April .. | — | 12 | — | — | 3 | — | — | 15 |
| May .. | — | 2 | — | — | 7 | 1 | — | 10 |
| June .. | — | 4 | — | — | 7 | — | — | 11 |
| July .. | — | 4 | — | — | 2 | — | — | 6 |
| August .. | — | — | — | — | 1 | — | — | 1 |
| September .. | — | 1 | — | — | 2 | — | — | 3 |
| October .. | — | 2 | — | — | 9 | 2 | — | 13 |
| November .. | — | 9 | — | — | 5 | 2 | — | 16 |
| December .. | — | 15 | — | — | 7 | — | — | 22 |
| Totals .. | — | 58 | 1 | — | 58 | 6 | — | 123 |

In table III. of the Local Government Board returns on page 46, full details are given of the age of patients, the number occurring in each ward, and the number of such removed to Hospital.

CASES ISOLATED IN HOSPITAL.

Of the 123 cases notified, 99 were removed ; this is equal to 80 per cent. They were as follows :—

Diphtheria 50 to the Sanatorium, Newton Road.
Scarlet Fever 49 „ „ „

The percentage of removals is highly satisfactory.

STEPS TAKEN TO PREVENT THE SPREAD OF INFECTIOUS DISEASE.

On the receipt of a notification, the house is visited as soon as possible, particulars as to source of infection, milk supply, school

attended, drainage, etc., obtained, and, if necessary, arrangements made for the removal of the patient to the Sanatorium. Frequently the Medical Attendant notifies that the case is one suitable for treatment in the Sanatorium, a step which greatly facilitates their early removal.

After removal, or on recovery, should the patient be isolated at home, the infected rooms and bedding are fumigated with formaline. Next day the bedding and clothing is removed to the Disinfecting Station and there sterilised in a steam disinfecter. In every case of notifiable disease this is done free.

The disinfecter is one of the Thresh Disinfecter Company's machines. It has now been in constant use for six years, without requiring any special attention. During the year, 9169 articles were disinfected, consisting of 445 mattresses, 489 pillows, 517 blankets, 227 bolsters, 128 sheets, 214 quilts, and 7,149 other articles of clothing, etc.

Where it is found that children in an infected house are attending one of the public elementary schools, the Attendance Officer is notified of the case. All cases suspected to be infectious by the School Attendance Officer, and where no doctor is in attendance, are notified to me as Medical Officer to the Education Authority.

The systematic notification of all cases of infectious sickness among the children attending the elementary schools by the head teachers has again proved of great value to me as Medical Officer of Health. In this way, I quickly become aware of the appearance of such diseases as measles, whooping cough, etc. Cases of absenteeism due to sore throats have also been notified, which proves of great value in dealing with diphtheria. I have again to thank the teachers for their willing co-operation.

MEANS OF ISOLATION.

The Borough Sanatorium, Newton Abbot Road, consists of the administrative Building—a Scarlet Fever ward block, consisting of two wards, with seven beds in each; and a Diphtheria ward block, two wards with seven beds in each. There is also a private ward for one patient, with Nurse's room attached.

ENTERIC FEVER.

When there is accommodation, the Authorities of the Torbay Hospital admit cases of this disease.

COCKINGTON SANATORIUM.

Taken over from the Cockington Urban District at the time

of the amalgamation. This hospital is considerably more than half-a-mile from any inhabited building, so that it is kept in readiness for the reception of small-pox, should any arise. Twice during the last five years has it proved its usefulness, as I have, by removing to it imported cases of small-pox without delay, prevented the spread of the disease. In a health resort such as Torquay, where the introduction of small-pox is not unlikely, and the consequence of an epidemic would be disastrous, such accommodation is absolutely indispensable.

SMALL-POX.

No cases of this disease were notified.

DIPHTHERIA.

In the beginning of the year 1908, Diphtheria seemed to have gained a footing in the Borough, and an excessive number of cases were notified, totalling ninety-nine. In 1909, some sixty-one cases were notified, tending to show that the disease was abating. As only thirty-four cases were notified up till the end of October, 1910, this seemed to confirm the opinion. The month of October was a particularly dry month and was followed by excessive rains in November and December, and Diphtheria notifications rose from practically zero in October to nine in November and fifteen in December. This leads one to the belief that the meteorological conditions had some influence in the increase. I also fear that the elections, with their numerous political meetings, the cheering and singing of partisans, was not without blame in spreading infection. During the year, fifty-eight cases were notified, being three less than in 1909, and forty-one less than in 1908. From the table giving the monthly notifications, it will be seen that the greatest number of cases occurred in April, November, and December. A curious feature of the disease was that cases occurred in every ward of the Borough, frequently notifications were received at the same time from the most remote parts of the town. In 1908 and 1909, the Wards suffering most severely were Upton, Torre, and Ellacombe; in 1910, they were Babbacombe, Ellacombe, and St. Mary-Church. I strongly believe that this disease is spread from those who have recovered from it many months previously. To illustrate my meaning I give the following history of four cases. In January, a girl was removed to the Sanatorium, the rooms and bedding disinfected, and the drains re-laid. After the usual period of detention, swabs were taken and found free from the specific organism; she was then discharged. In October, or nine months later, a brother was removed suffering from Diphtheria. In the second instance, a girl was removed in

March. During her stay in the Sanatorium, her parents removed from one part of the town to the other and, on her discharge, she went to the new house. Seven months later her brother took Diphtheria. In all probability what happens is that the first patient gets a cold and the organism which may have been dormant for many months become active and thus infect other persons. If this occurs among members of the same family, it must occur in others. In neither of the instances related did swabs taken from the supposed carrier cases show the specific organism. I cannot believe that, if isolation of patients is carried out, as is done here, where some 86% of the cases notified are removed to the Sanatorium, new centres of infection arise from importations or unrecognised cases. There is no doubt, in my own mind, that ninety-nine times out of every 100, personal contact is alone responsible for infection, and from a careful examination into the histories of the cases occurring during the year, I am satisfied that no other factor, such as milk, had anything to do with the spread.

When investigating the several cases occurring in Babbacombe, it was ascertained that for some months past a large number of cats had been ill and that several had died. One cat was found very ill and a swab was taken from its throat, but the specific organism was not found. As this animal died the next day, I examined the mouth and trachea, and, as these looked suspicious, I sent them to the Chemical Research Association, but with negative results.

In August, a circular letter was received from the Local Government Board advising Sanitary Authorities to arrange for the free distribution of Anti-toxin in all cases of Diphtheria or suspected Diphtheria, and also for its prophylactic use. Although to some extent we had been doing this, the Sanitary Committee instructed me to prepare a circular letter, drawing the attention of the various medical practitioners to the facilities provided. Accordingly the following circular letter was sent out:—

“BOROUGH OF TORQUAY.

November, 1910.

PROVISION OF DIPHTHERIA ANTI-TOXIN.

Dear Sir,

An Order has been made by the Local Government Board sanctioning the free provision by Health Authorities of anti-toxin for prompt use in the case of persons who may be attacked by diphtheria, or exposed to the infection of the disease.

I have been instructed by the Sanitary Committee of the above Council to inform you that supplies of anti-toxin will be kept by the following chemists, and may be obtained from them on application:—

Spot Map of Diphtheria Cases.

NOTE.—Numbers indicate sequence of cases.

INDEX—SCHOOLS.

- A. St. James' C.E.
- B. Upton C.E.
- C. Tor Parochial.
- D. Ellacombe C.E.
- E. Victoria Park.
- F. Pimlico C.E.
- G. St. Luke's C.E.
- H. St. John's C.E.
- I. Torwood C.E.
- J. Ilsham Parochial.
- K1. St. Mary-Church Boys'.
- K2. St. Mary-Church Girls'.
- L. St. Mary-Church Priory Roman Catholic.
- M. Babbacombe.
- N. Abbey Road Roman Catholic.
- O. Cockington C.E.
- P. Hele.



Mr. F. CUTMORE, Fore Street, St. Mary-Church. Telephone No. 65.

Messrs. COCKS & DUNSFORD, Castle Circus. Telephone No. 245.

Mr. QUANT, Torwood Street. Telephone No. 58.

I am, however, to emphasise that this free provision of anti-toxin is not to be regarded as a substitute for removal to hospital of a patient suffering from diphtheria. It is to encourage the immediate use of anti-toxin in all cases, especially those of a doubtful nature, it having been amply proved that the earlier anti-toxin is used the more effective it becomes; in fact, it should be injected as a matter of routine in all suspected cases prior to confirmation by bacteriological examination.

The Committee trust you will take full advantage of these arrangements.

I am, sir,

Yours faithfully,

THOMAS DUNLOP, M.B.,

Town Hall Chambers, Torquay.

Medical Officer of Health."

From the accompanying spot map it will be seen that Babbacombe Ward, has provided the greatest percentage of cases throughout the year. I therefore obtained the instruction of the Authority to make a house to house inspection of certain streets in this ward. Mr. Body and I have already examined some forty houses, obtaining all the details required under the Act; and also, in suspicious cases, have had the drains tested. A full report is being prepared for the Committee.

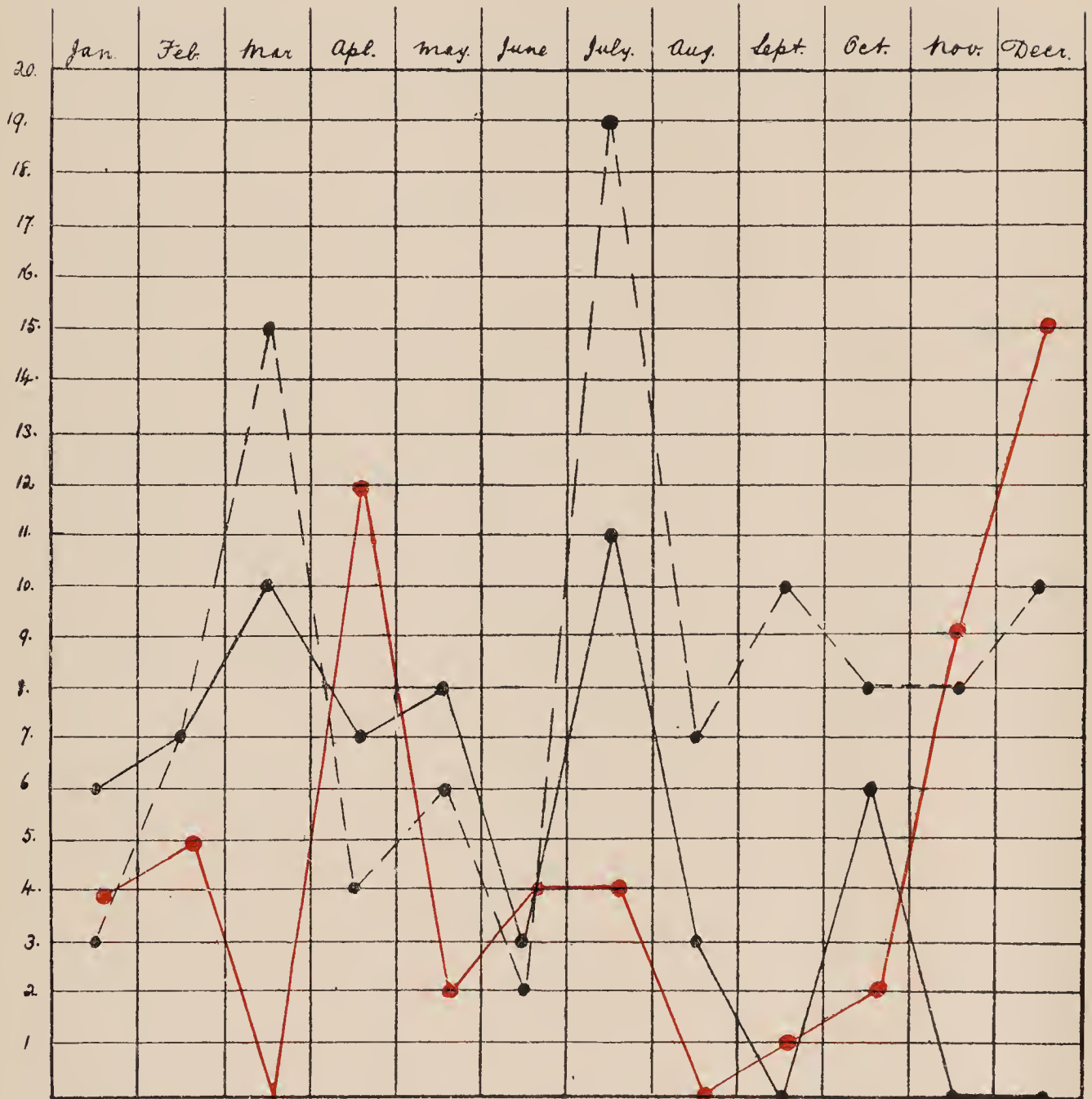
The following table gives the monthly notifications and the wards in which they occurred:—

| | Jan. | Feb. | Mar. | April. | May. | June. | July. | Aug. | Sep. | Oct. | Nov. | Dec. | Totals. |
|----------------|------|------|------|--------|------|-------|-------|------|------|------|------|------|---------|
| Torre | — | — | — | — | — | — | — | — | — | — | 1 | 1 | 2 |
| Waldon | 1 | — | — | — | — | — | — | — | — | — | — | — | 1 |
| Upton | — | 1 | — | — | — | — | — | — | — | — | — | 2 | 3 |
| Ellacombe .. | — | 3 | — | — | 1 | — | — | — | — | — | 4 | 5 | 13 |
| Strand | — | — | — | — | — | 1 | — | — | — | — | — | — | 1 |
| Torwood | — | 1 | — | 1 | — | 1 | — | — | — | 1 | — | — | 4 |
| Mary-Church .. | — | — | — | 6 | — | — | 3 | — | — | — | — | 1 | 10 |
| Babbacombe .. | — | — | — | 5 | — | 2 | 1 | — | — | — | 4 | 6 | 18 |
| Chelston | 3 | — | — | — | 1 | — | — | — | 1 | 1 | — | — | 6 |
| Totals | 4 | 5 | 0 | 12 | 2 | 4 | 4 | 0 | 1 | 2 | 9 | 15 | 58 |

For the sake of comparing the seasonal prevalence of the disease in this and the previous two years, the accompanying chart has been prepared:—

Monthly Notifications of Diphtheria

1908. — 09. — 10.



1908. • - - - - •

1909. • ——— •

1910. • Red. •

The age and sex distribution is as follows :—

| Ages. | 1—5 | 5—15 | 15—25 | 25—65 | Totals. |
|---------------|-----|------|-------|-------|---------|
| Males | 11 | 14 | 3 | 0 | 28 |
| Females | 5 | 22 | 1 | 2 | 30 |
| Totals | 16 | 36 | 4 | 2 | 58 |

Of the fifty-eight cases notified, fifty, or 86%, were removed to the Sanatorium for treatment.

Eight deaths were registered, giving a case mortality of 13·7%. This is slightly higher than in the previous two years. Three of these deaths were in children who were not suspected to have the disease until just before the case terminated fatally.

In all instances, diphtheria contacts are kept under observation for fourteen days, and all children discharged from the Sanatorium cured are kept at home a similar period and again examined prior to their return to school.

STEPS TAKEN TO PREVENT SPREAD.

On receipt of a notification I immediately visited the infected house, and endeavoured to secure the patient's removal to the Sanatorium. As soon as this was done the room was fumigated with formaline, and when opened the bedding removed and put through the steam disinfecter. All children from infected houses being excluded from school for fourteen days, the teachers being informed and asked to be on the look-out for and to notify me of any suspicious cases. As I have already stated, this resulted in many visits being paid to suspicious cases, and the detection of several true unrecognised ones. Notice of notification was also sent to the Librarian at the Free Library.

In every house where there was the slightest reason to believe there was anything wrong with the drains, they have been tested, and in many cases defects proved. There has been no difficulty in getting these remedied. Many visits have been paid to the schools and children examined, in the hope of detecting cases likely to be infectious, swabs being taken in most instances.

The Council have an arrangement with Mr. Quant, of the

South Devon Chemical and Bacteriological Laboratory, to examine swabs free for medical men in the Borough, and this has been taken full advantage of.

The County Council have also made arrangements whereby the Medical Officer of Health can have swabs examined free.

SCARLET FEVER.

Fifty-eight cases were notified against seventy-three in 1909. One death was certified as due to scarlet fever. This occurred some five months after the patient had been discharged from the Sanatorium, where he had suffered from rheumatic fever and endocarditis. From the table of monthly notifications it will be seen that cases occurred in every month of the year and in every ward in the Borough. Ellacombe and Strand Wards showed the highest incidence. In most cases the disease was of a very mild nature. There is no doubt the character of this disease has altered considerably during recent years; it is exceptional in these days to see patients dying in the early stages of the fever from the absorption of the septic poisons. Of the fifty-eight cases notified, forty-nine, or 84% were removed to the Sanatorium. On several occasions children have been discovered attending school in an infectious condition.

The age and sex distribution is as follows :—

| | At all ages. | 1—5 | 5—15 | 15—25 | 25—65 |
|---------------|--------------|-----|------|-------|-------|
| Males | 28 | 7 | 14 | 4 | 3 |
| Females | 30 | 10 | 14 | 2 | 4 |

ENTERIC FEVER.

Only one case was notified during the year. This occurred in the Babbacombe Ward. There was nothing in the history to indicate the source of infection.

PUERPERAL FEVER.

No cases were notified.

BACTERIOLOGICAL DIAGNOSIS.

The bacteriological work for the Council is carried out by Mr. Quant, of the South Devon Chemical and Bacteriological

Laboratory. Medical practitioners are able to have suspected specimens examined without delay and free of cost.

The Devon County Council have also made arrangements for Medical Officers of Health to have specimens examined. This has been of considerable use in dealing with school cases.

During the year, 166 specimens were examined for the presence of the Diphtheria bacillus; 50 gave positive results and 116 negative, this latter includes those examined for freedom from infection. 2 specimens were examined for the Widal reaction; 1 gave a positive result, while 1 was indefinite.

SANATORIUM REPORT

FOR THE YEAR ENDING MARCH, 1910.

To the Chairman and Members of the Sanitary Committee.

GENTLEMEN,

At the close of the financial year 1909, there were 9 patients under treatment, from then till March 31st, 1910, 112 patients were admitted, making a total for the twelve months of 121.

The numbers from the various diseases compared with those of the previous year are as follows:—

| | | 1909-1910. | 1908-1909. |
|-------------------|-----|------------|------------|
| Diphtheria | ... | ... 46 | 86 |
| Scarlet Fever | ... | ... 72 | 59 |
| Measles | ... | ... 1 | 0 |
| Erysipelas | ... | ... — | 1 |
| German Measles | ... | ... 1 | — |
| Enteric Fever | ... | ... — | 1 |
| Under observation | ... | ... 1 | 2 |
| | | <hr/> 121 | <hr/> 149 |

The total number of days these patients were under treatment was 4,153, compared with 3,290 days in the previous year. The average length of stay was 36·33

One hundred and fourteen patients were discharged cured, two ended fatally, while five were under treatment at the end of the year.

The following table shows the cost of working for the twelve months :—

| EXPENDITURE. | | | | £ | s. | d. |
|-------------------------------|-----|-----|-----|-------|----|----|
| Diet of Patients | ... | ... | ... | 298 | 2 | 11 |
| Wages and Diet of Nurses | ... | ... | ... | 240 | 16 | 2 |
| „ „ Laundress | ... | ... | ... | 89 | 13 | 0 |
| Curator | ... | ... | ... | 74 | 5 | 0 |
| Surveyor's Accounts | ... | ... | ... | 65 | 17 | 1 |
| Tradesmen's Accounts | ... | ... | ... | 103 | 15 | 0 |
| Rents, Rates, Insurances, &c. | ... | ... | ... | 17 | 13 | 10 |
| Drugs and Disinfectants | ... | ... | ... | 38 | 8 | 0 |
| Medical Fees | ... | ... | ... | 107 | 10 | 6 |
| Conveyance of Patients | ... | ... | ... | 29 | 10 | 0 |
| Oil, Coal, Coke, and Wood | ... | ... | ... | 47 | 7 | 8 |
| Rent of Telephone | ... | ... | ... | 10 | 0 | 0 |
| Disinfecting | ... | ... | ... | 16 | 7 | 0 |
| | | | | £1139 | 6 | 2 |

The sum of £24 12s. was received for use of the private ward, so that the net cost of the up-keep of the Sanatorium amounted to £1,114 14s. 2d. The cost per patient works out at £9 9s. 1d.

The following table gives the cost of this and previous years :—

| | | | | £ | s. | d. |
|-------|-----|---------------|-----|------|----|----|
| 1899. | 35 | Patients cost | ... | 513 | 14 | 11 |
| 1900. | 42 | „ „ | ... | 564 | 2 | 10 |
| 1901. | 26 | „ „ | ... | 515 | 15 | 11 |
| 1902. | 58 | „ „ | ... | 903 | 6 | 6 |
| 1903. | 26 | „ „ | ... | 570 | 12 | 5 |
| 1904. | 24 | „ „ | ... | 484 | 11 | 1 |
| 1905. | 72 | „ „ | ... | 507 | 5 | 0 |
| 1906. | 36 | „ „ | ... | 541 | 13 | 7 |
| 1907. | 46 | „ „ | ... | 616 | 12 | 2 |
| 1908. | 71 | „ „ | ... | 646 | 3 | 6 |
| 1909. | 149 | „ „ | ... | 1150 | 2 | 10 |
| 1910. | 121 | „ „ | ... | 1139 | 6 | 2 |

COCKINGTON SANATORIUM.

During the year it was not necessary to utilise this building, but it was kept in readiness so that patients could be received at the shortest notice.

Its cost of maintenance is as follows :—

| | | | £ | s. | d. |
|---------------------|-----|-----|----------|----|------|
| Caretaker | ... | ... | ... | 3 | 15 0 |
| Rents, Rates, Taxes | ... | ... | ... | 23 | 15 0 |
| | | | <hr/> | | |
| | | | £27 10 0 | | |
| | | | <hr/> | | |

The working of the institution has been carried out in a smooth and satisfactory manner.

Your obedient servant,

THOMAS DUNLOP,

Medical Superintendent.

Working of the Midwives' Act, 1902.

This Act is administered by a Committee of the County Council, who have appointed me their local inspector.

There are seven midwives on the local register, the same as in 1909. I have regularly visited them at their own homes, inspecting their register of cases and bags of appliances.

ELEMENTARY SCHOOLS.

Matters pertaining to this subject are dealt with in the special report to the Education Authority.

VITAL STATISTICS.

The total deaths registered in the Borough during 1910 was 517 ; males 206, females 311. This is sixty-five more than in 1909, which, however, was a record year. The gross death rate is equal to 15.1 per 1,000. If it was permissible to eliminate the deaths of all visitors, the rate would be 14.7 per 1,000. In my last report I drew attention to the disadvantage that we suffer from in only being able to exclude the deaths of visitors dying in

public institutions. I also recorded the fact that on communicating my views on the subject to the Registrar General's office, I was informed that this was being considered by them. Now (January, 1911), a circular letter has been received from the Local Government Board, stating that the Registrar General will, in future, regularly supply Medical Officers of Health with lists of transferable deaths, to enable them to correct statistics. Transferable deaths are defined as deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they resided. To obtain the corrected death rate, it is necessary to add the deaths of twenty-five persons dying in the Newton Abbot Workhouse who belong to Torquay, six deaths which took place in the Isolation Hospital, and ten deaths of Torquay residents in the County Asylum at Exminster; to deduct the deaths of eighteen non-residents dying in public institutions in the district. The corrected total is, therefore, 540, which equals a rate of 15·8 per 1,000 per annum.

The following table gives the Torquay death-rates for recent years, compared with those in England and Wales for corresponding years :—

| Year. | Number of Deaths. | Death-rate. | Death-rate excluding deaths of Visitors. | Death-rate of England and Wales. |
|-------|-------------------|-------------|--|----------------------------------|
| 1901 | 476* | 14·1 | 12·9 | 16·9 |
| 1902 | 491* | 14·6 | 13·3 | 16·3 |
| 1903 | 448 | 13·3 | 11·5 | 15·4 |
| 1904 | 482 | 14·2 | 12·4 | 16·2 |
| 1905 | 491 | 14·5 | 12·6 | 15·2 |
| 1906 | 499 | 14·6 | 13·5 | 15·0 |
| 1907 | 529 | 15·5 | 14·2 | 15·0 |
| 1908 | 602 | 17·6 | 16·3 | 14·7 |
| 1909 | 472 | 13·8 | 12·8 | 14·5 |
| 1910 | 540 | 15·8 | 14·7 | 13·4 |

* No record kept of deaths in Newton Workhouse of Torquay residents.

If the Torquay death rate is corrected for sex and age distribution to make it comparable with that for England and Wales, it would be equal to 12·7 per 1,000 per annum. During the year there were thirty inquests held, and five deaths were uncertificated.

Of the total 540 deaths—

| | | | | | | Percentage of total deaths. |
|-------|----------------------------|----|------|--------|----|-----------------------------|
| 54 | were under 1 year of age | .. | .. | equals | | 10·0 |
| 16 | „ 1 year and under 5 years | .. | .. | „ | | 3·0 |
| 14 | „ 5 years | „ | 15 | „ | .. | 2·0 |
| 20 | „ 15 | „ | 25 | „ | .. | 4·0 |
| 187 | „ 25 | „ | 65 | „ | .. | 35·0 |
| 249 | „ 65 | „ | over | .. | .. | 46·0 |
| Total | 540 at all ages | | | | | 100·0 |

It will be seen from the above that 249, or 46 per cent. of the total deaths were those of persons aged 65 and upwards.

The deaths in various Wards are given in Table II. on page 45.

INFANTILE MORTALITY.

There were 54 deaths of children under one year of age, one more than in 1909. As there were 539 births registered, the infantile mortality works out at 100 per 1,000 births. The rate for England and Wales during 1909 was 106, and that for the 136 small towns 104.

The following table gives the causes of death among infants for the past five years :—

| | 1910. | 1909. | 1908. | 1907. | 1906. |
|------------------------|-------|-------|-------|-------|-------|
| Measles | 0 | 1 | 0 | 2 | 0 |
| Whooping Cough .. | 1 | 2 | 2 | 1 | 1 |
| Influenza | 0 | 0 | 1 | 0 | 0 |
| Diarrhœa | 3 | 6 | 20 | 8 | 16 |
| Tubercular Diseases .. | 2 | 2 | 4 | 0 | 0 |
| Bronchitis | 4 | 7 | 7 | 6 | 3 |
| Pneumonia | 5 | 2 | 5 | 3 | 4 |
| Premature Birth .. | 14 | 11 | 12 | 8 | 16 |
| Accidents | 1 | 4 | 0 | 0 | 0 |
| All other causes .. | 24 | 18 | 24 | 24 | 21 |
| Totals | 54 | 53 | 75 | 52 | 61 |

Fuller particulars giving exact details as to cause of death and the age, stated in weeks and months, under one year, are given in Table V., page 48.

THE CAUSES OF DEATH.

The Local Government Board Table IV. gives the causes and ages at death. *Vide* page 47.

DEATHS FROM ZYMOTIC DISEASES.

The Zymotic death-rate is calculated from the number of deaths due to the seven principal Zymotic diseases. The following table gives them and the deaths recorded from each :—

| | | | | | |
|----------------|----|--------------------------------|----|----|---|
| Small-pox | .. | .. | .. | 0 | |
| Measles .. | .. | .. | .. | 0 | |
| Whooping Cough | | .. | .. | 3 | |
| Scarlet Fever | .. | .. | .. | 1 | |
| Diphtheria | .. | .. | .. | 9 | |
| Fevers | { | Typhus Enteric Continued | } | .. | 0 |
| Diarrhoea | .. | .. | .. | 3 | |
| | | | | — | |
| Total | | | | 16 | |

The death rate from Zymotic diseases for the year is equal to .49 per 1,000, compared with .5 in 1909. The rate for England and Wales was .99 per 1,000.

SMALL-POX.

No cases were notified. Attention is drawn to remarks on Vaccination on page .

MEASLES.

Measles did not occur in epidemic form during the year. There were no deaths.

WHOOPING COUGH.

Whooping Cough accounted for three deaths, although it cannot be said to have occurred in epidemic form.

INFLUENZA.

Seven deaths are registered as due to Influenza, against six in 1909.

DIARRHŒA AND ENTERITIS.

There were only three deaths due to Diarrhœa and two to Enteritis. This is exceptionally low. Much must be attributed to the climatic conditions during the late summer. At no time was there any lengthy spell of dry weather.

PHTHISIS AND TUBERCULAR DISEASES.

The total number of deaths from Phthisis was 57. Of this number nine were non-residents dying in public institutions, so these must be deducted; but we must add the deaths of five Torquay residents who died in Newton Abbot Workhouse: the total for the year is therefore 53, against 39 in 1909.

The rates per 1,000 of the population for the past five years are as follows:—

| 1910. | 1909. | 1908. | 1907. | 1906. |
|-------|-------|-------|-------|-------|
| 1·5 | 1·14 | 1·9 | 0·88 | 1·38 |

Other forms of tubercular disease accounted for five deaths, the same as in 1909.

Under the system of voluntary notification of Phthisis only five cases were notified. Occasionally doctors write informing me when a patient has either left or changed his lodgings, so that disinfection can be carried out. Under the Public Health (Tuberculosis) Regulations, 1908, four notifications were received under Form A, eight under Form B, none under Form C, and one under Form D. It is our custom to visit those cases notified by the Poor Law Medical Officer, get particulars of the case, leave leaflet dealing with the precautions to be taken, and supply disinfectants. In cases where the patient dies, or is removed, disinfection is carried out free of cost.

In Torquay the Town Council have recognised the importance of dealing efficiently, as far as lies in their power, with cases of Phthisis. The steps taken may be summarised as follows:—

1. Free disinfection of rooms after death of consumptives and, where aware of it, of rooms recently occupied by them.
2. The framing of a bye-law prohibiting spitting in places of public resort.
3. Distribution of educational leaflets by such agencies as are likely to reach those for whom they are intended.

They have also by posting up notices on lamps and other places in parts of the town frequented by consumptives, endeavoured to stop the objectionable and dangerous habit of spitting.

CANCER.

Cancer was responsible for 45 deaths, of whom three were inmates of the Newton Abbot Workhouse. In dealing with such a disease as cancer, which is essentially a disease affecting people

in the prime and latter part of life, and more especially females, it must be remembered that communities such as Torquay, whose population have a larger proportion of such people than the country generally, will suffer more severely.

The death-rate from cancer in Torquay during 1910 was 1.3 per 1,000 per annum. If this rate is corrected for age and sex distribution, to make it comparable with that for England and Wales, it would equal 1.04 per 1,000 per annum.

AGE AND SEX DISTRIBUTION OF CANCER DEATHS.

| | under 30 | 30—35 | 35—45 | 45—55 | 55—65 | 65—75 | over 75 | Totals |
|---------|----------|-------|-------|-------|-------|-------|---------|--------|
| Males | 0 | 2 | 1 | 5 | 1 | 4 | 6 | 19 |
| Females | 1 | 0 | 2 | 4 | 8 | 8 | 3 | 26 |
| Total | 1 | 2 | 3 | 9 | 9 | 12 | 9 | 45 |

The following table gives the chief headings under which deaths from cancer occurred :—

REGISTERED DEATHS FROM CANCER (MALIGNANT DISEASE).

| Seat of Disease. | Sarcoma. | | Carcinoma. | | Malignant Disease or Cancer. | | Total. |
|----------------------------------|----------|----|------------|----|------------------------------|----|--------|
| | M. | F. | M. | F. | M. | F. | |
| Face, Jaw, Tongue | 0 | 1 | 1 | 0 | 3 | 0 | 5 |
| Throat and Thorax | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| Oesophagus | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Stomach and Pylorus | 0 | 0 | 3 | 3 | 2 | 2 | 10 |
| Liver and Pancreas | 0 | 0 | 0 | 2 | 1 | 0 | 3 |
| Intestines (excluding Rectum) .. | 0 | 0 | 2 | 1 | 2 | 0 | 5 |
| Rectum | 0 | 0 | 1 | 2 | 0 | 1 | 4 |
| Breast | 0 | 0 | 0 | 7 | 0 | 1 | 8 |
| Uterus and Appendages .. | 0 | 1 | 0 | 3 | 0 | 1 | 5 |
| Parts not specified | 1 | 0 | 1 | 0 | 0 | 0 | 2 |
| Totals | 1 | 2 | 9 | 18 | 9 | 6 | 45 |

Sanitary Work, 1910.

No changes have been made in the staff of the Sanitary Department during the year.

SLAUGHTER HOUSES.

Early in the year a report was made to the Sanitary Committee that certain renovations and repairs were necessary in the various slaughter-houses in the district. There are eight of these in the Borough—four are registered, one has a perpetual license, while three require to be licensed each year. A Sub-Committee, appointed for the purpose, inspected these and various defects noted. On reporting to the full Committee, the Town Clerk was instructed to communicate with the owners, pointing out the defects and requesting that it should be remedied without delay. The work was done without any serious friction and, in order to strengthen our hands, I reported to the Committee as follows :—

SLAUGHTER-HOUSE AND MEAT INSPECTION.

*Copy of Report to the Sub Sanitary Committee,
November 21st, 1910.*

GENTLEMEN,

Now that the repairs and alterations ordered by your Committee have been practically completed, and the whole of the Licensed and Registered Slaughter-Houses put in a good sanitary condition, I would suggest that the local Byelaws be revised so as to bring within their operations a large number of clauses not dealt with in the Byelaws at present in force in the Borough. Your consideration is therefore requested to the Byelaws presented to you to-day, and in the event of their meeting with your approval, or such alteration as you consider necessary, the usual resolution may be passed that they be submitted to the Local Government Board for their sanction.

Another point requiring attention in connection with these slaughter-houses is the granting of the license so that they expire on one date instead of at different times during the year.

Section 29 Public Health Act Amendment Acts, 1890, is as follows :—

“Licenses granted after the adoption of this part of the Act for the use and occupation of places as slaughter-houses shall be in force for such time or times only, not being less than twelve months, as the urban authority may think fit to specify in such license.”

I should therefore suggest that all applications for licenses should come before the Sanitary Committee at their meeting prior to the 9th November, so that all new licenses might commence from that date.

If this method of licensing slaughter-houses is adopted, the Sanitary Committee who control the inspection and supervision of the premises can take into consideration when application is made for the renewal of the license the condition in which the slaughter-houses have been kept during the past year, and if the Sanitary Officers have been obstructed in the inspection of the cattle and meat prepared for sale therein, when if, in the opinion of the Sanitary Committee, the Byclaws and Acts regulating these places have not been observed, the Committee can exercise their discretion in the granting of the license or not.

Here, it is desirable to bear in mind, that in the event of the Council erecting an Abattoir of their own, it would be necessary to close all privately-owned slaughter-houses. This would mean compensating the owners of the private slaughter-houses, consequently the owner of the registered slaughter-house or the person with a license granted for a period longer than twelve months, could claim greater compensation than the owner of the slaughter-house whose license is granted annually.

In connection with the important duty of meat inspection, I consider it advisable that this should be in the hands of one Inspector, so that such inspection should be carried out on definite and uniform lines.

The following recommendations were issued by the Royal Commission on tuberculosis in 1898 :—

“In view of the greater tendency to generalization of tuberculosis in the pig, we consider that the presence of tubercular deposit in any degree should involve seizure of the whole carcase and of the organs.”

“In respect to foreign dead meat, seizure shall ensure in every case where the pleura have been “stripped.””

- (a) Where there is miliary tuberculosis of both lungs.
- (b) When tuberculous lesions are present on the pleura and peritoneum.
-) When tuberculous lesions are present in the muscular system, or in the lymphatic glands embedded in or between the muscles.
- (d) When tuberculous lesions exist in any part of an emaciated carcase.

The entire carcase and all the organs may be seized.

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> (a) When lesions are confined to the lungs and the thoracic lymphatic glands. (b) When lesions are confined to the liver. (c) When lesions are confined to the pharyngeal lymphatic glands. (d) When lesions are confined to any combination of the foregoing, but are collectively small in extent. | } | <p>The carcase, if otherwise healthy shall not be condemned, but every part of it containing tuberculous lesions shall be seized.</p> |
|---|---|---|

During the past twelve months these recommendations have been carried out except in the case of the pig.

Mr. Body, who has had considerable experience in meat inspection, especially in the examination of pigs, has followed out the same method of inspection here as prevails in Wolverhampton, Manchester, and several other large towns, viz., That where the disease is confined to one organ or is collectively small in extent only that part affected is destroyed. However, considering the importance of the matter, it is desirable to have the views of your Committee thereon.

During the past twelve months three beasts and one pig were found to be affected with localized tuberculosis, necessitating the destruction of about 100lbs. of the organs or carcase. There has also been destroyed during the above-named period, 164lbs. of meat and internal organs affected with a variety of diseases.

To show the amount of work involved in carrying out this inspection, 434 visits have been paid to the slaughter-houses, and 1,049 carcasses examined: this number includes sheep and pigs.

It should be understood that no special time can be set apart for meat inspection, but the visits should be made to the slaughter houses when it is likely slaughtering is taking place. This means that the Inspector must to a great extent use his own discretion in visiting the slaughter-houses and endeavour to be on the spot during the time of dressing or before the removal from the premises of the internal organs and carcasses.

Assuming, therefore, that we attain fair efficiency of inspection of the animals dressed in slaughter-houses, it is of equal importance that the meat hawked from house to house from butchers carts which come into the town from the outlying districts should receive some little attention, as it is very doubtful indeed if the meat so sold has ever received any sort of examination. This then brings us to the legal status of the Assistant Sanitary Inspector to inspect, and if necessary seize diseased or unsound meat or food.

The Public Health Acts apparently do not recognise the Assistant Inspector, and recent correspondence with the Local Government Board seems to confirm this. However, the Local Government Board point out in their last letter, that under the Towns Improvement Clauses Act, 1848, the Town Council could appoint an officer under section 131 to inspect and seize unsound meat. This section is as follows :—

“The Inspector of Nuisances, the Officer of Health, or other officers appointed by the commissioners for the purpose, may at all reasonable times, with or without assistance, enter into and inspect any building or place kept or used for the sale of butchers’ meat or for slaughtering cattle, and examine whether any cattle, or the carcase of any such cattle, is deposited there, and in case such officer shall find any cattle, or the carcase or part of any beast, which appears unfit for the food of man, he may seize and carry the same before a justice, and in case upon examination such cattle, carcase, or the part of a carcase, be found unfit for the food of man, such justice shall order the same to be immediately destroyed or otherwise disposed of in such a way as to prevent the same being exposed for sale or used for the food of man, and the justice may adjudge the person to whom such cattle, carcase or part of a carcase belongs, or in whose custody the same is found, to pay a penalty not exceeding ten pounds for every such animal, carcase, meat, &c., so found.”

The section also provides a penalty of five pounds for obstructing or hindering an Inspector, or other officer, from entering and inspecting premises in manner directed by the section.

It will be noticed that under this section power is given to the “Officer of Health, Inspector of Nuisances, or other officers.”

I should, therefore, suggest that advantage be taken of this section and the Council be requested to sanction the appointment of such officer as the Act directs.

T. DUNLOP,

Medical Officer of Health.

The Sanitary Committee resolved to appoint Mr. Body their officer, under section 131 of the Towns Improvement Clauses Act, 1848, to inspect and seize unsound meat. The suggested alterations in our Bye-laws were also ordered to be sent to the Local Government Board, asking for their approval.

SALE OF FOOD AND DRUGS ACT.

Samples are taken by the County Police. Through the

courtesy of Superintendent Roberts, I am enabled to give the following table showing the number of samples taken and the result :—

| No. of Samples | Articles for Analysis. | Result of Analysis. | Result of Summoned Cases. |
|----------------|------------------------|--|---|
| 6 | Gin | Genuine | Vendor cautioned by Police |
| 9 | New Milk | Genuine | |
| 1 | New Milk | Deficient in milk fat to the extent of 3·4% | |
| 1 | New Milk | Deficient in milk fat to the extent of 6·7% | |
| 1 | Skim Milk | Genuine | |
| 12 | Margarine | Genuine | Vendor cautioned by Police |
| 11 | Lard | Genuine | |
| 1 | Lard | Contained cotton-seed oil stearin to extent of 40% | |
| 3 | Butter | Genuine | |
| 1 | New Milk | Deficient in milk fat to the extent of 10% | |
| 6 | New Milk | Genuine | Vendor summoned by Police, fined 5/- and 11/- costs |
| 6 | Butter | Genuine | |
| 4 | New Milk | Genuine | |
| 2 | Skim Milk | Genuine | |
| 6 | Butter | Genuine | |
| 4 | New Milk | Genuine | |
| 2 | Scald Milk | Genuine | |
| 1 | Cocoa | Genuine | |
| 1 | Coffee | Genuine | |
| 1 | Vinegar | Genuine | |
| 1 | Rice | Genuine | |
| 1 | Syrup | Genuine | |
| 1 | Moist Sugar | Genuine | |
| 82 | | | |

MILK SUPPLY.

There are ninety-eight registered dairymen and cowkeepers in the Borough, most of whom receive milk from farms situated outside.

The system in vogue of inspecting these outside farms has been carried out twice during the year.

Particulars are obtained of the condition of the cowsheds as to cleanliness, lighting, ventilation, and paving; the washing of milk vessels; cleanliness of dairies, etc.; the water supply as regards its freedom from pollution; and the number and condition of the cows being milked.

After these inspections a complete register is compiled of all dairies and cowsheds in the Borough, together with the farms outside which supply them with milk, etc. The register is printed in the form of a bill, and is posted up throughout the town, copies being forwarded to all dairymen and farmers concerned. Such bills are a guarantee that we are satisfied with the sanitary state of the places inspected, and is in force for six months. Thus two thorough inspections are made each year.

Although this periodic inspection cannot guarantee that the cowsheds, etc., are constantly kept as they ought to be, yet it ensures that at least twice a year they get a thorough cleaning and limewashing, which in many instances would not be done if the visits were not made. It is also frequently possible for us to get owners to substitute brick or concrete for defective cobble paving, which reduces the difficulty of cleaning to a minimum. Again, by this system we know precisely what farms supply the various town purveyors, and have a full knowledge of the farm, water supply, and other details, which are of immense value when investigating the source of infectious disease.

A point that apparently receives too little attention from the farmers is the proper grooming of the cows, the cleansing of their udders and the hands of the milkers. Too much faith is put in the efficiency of the strainer.

In South Devon, where it is possible to keep cows in the open air, night and day, for the greater portion of the year, tubercular disease in cattle should be less prevalent than in other places where the climatic conditions are less favourable.

In acknowledging the hearty co-operation of Dr. Mapleton, Medical Officer of Health for Newton Rural District, I should like to record an opinion expressed by him in some correspondence *re* cowsheds, and with which I fully concur:—"I wish the law was

more definite. My idea is that the Local Government Board should lay down structural regulations, *i.e.*, that floors should be of concrete or brick, walls impervious, ceilings sound, and that the window area should bear a fixed relation to floor space ; amongst other things, no manure to be deposited within a fixed distance of milking sheds. I think then that every cowkeeper should have a certificate signed by the M.O.H. and Sanitary Inspector, to the effect that all these structural matters are in accordance with the requirements of the Local Government Board. Also that a list of those who have such certificates should be in the hands of the police, and that the latter should prosecute anyone selling milk without it. At present too much latitude is given to opinion.'

ICE CREAM.

There are two manufacturers of ice cream, which is hawked in the streets from barrows or vans. Their premises were inspected and found to be clean and apparently well looked after. The premises of confectioners, etc., were inspected when the bakehouses were visited.

FACTORY AND WORKSHOPS.

The inspection of factory and workshops of the Borough is carried on by Mr. Body, with the exception of bakehouses and marine stores, which are under the charge of the Inspectors in their own districts. From his report it will be seen that Mr. Body has made a large number of visits of inspection, and has effected useful improvements in the sanitary condition of several premises. I have frequently accompanied him, especially when inspecting large dressmaking, millinery, and tailoring establishments. During the year my attention was drawn to illnesses among the employees of a large laundry, due to fumes and escape of gas used in the ironing room. His Majesty's Inspector of Factories was communicated with, and he got improvements in ventilation, etc., effected, which quickly cured the trouble.

A very large proportion of the workshops on the register are domestic laundries, where in most instances only a few women are employed. They are on the whole kept clean and lime-washed.

BAKEHOUSES.

I make a point of visiting these with the Inspectors. There are 52 on the register. Four have certificates as satisfactory underground bakehouses. For the most part the bakehouses are well looked after and regularly limewashed. Some occupiers, however, require constant supervision to effect even moderate cleanliness.

OFFENSIVE TRADES.

There is only one tripe boiling establishment in the Borough.

It is situated at the upper end of Upton. The building is specially adapted for the purpose, and is always found clean and well looked after.

MARINE STORES.

The powers conferred by the Public Health Acts Amendment Act, 1907, in dealing with marine store keepers have been enforced. All such persons in the Borough have been registered and their premises regularly inspected. From a sanitary point of view this is desirable, as many store bones, often in large quantities, which are a nuisance and a menace to the health of the surrounding inhabitants.

COMMON LODGING HOUSES.

In order to comply with the requirements of the P.H.A.A.A., 1907, which the Council have adopted, a formal inspection was made not only of the registered common lodging houses but several others suspected to be such. Now we have eight lodging houses registered in the district, whose keepers and deputy-keepers are also registered. The places are regularly inspected, and are kept clean.

HOUSING OF THE WORKING CLASSES ACT.

The persons of the working classes are on the whole well-housed, but there are parts of the district which require constant supervision. Under the Housing and Town Planning Act, etc., a certain amount of work has been done in the way of house to house inspections, and several rooms discovered being used as cellar dwellings, as defined by that Act, have been closed. Such inspections were started in two streets in Babbacombe, where, at intervals, cases of diphtheria had occurred during the year; a report is being prepared and it is hoped the defects discovered will soon be removed. Other portions of the town will be similarly inspected, and the inspectors have instructions to obtain the required details whenever called in, in reference to houses of this class. There seems to be some difference of opinion as to the meaning intended by certain sections of this Act which will doubtless be cleared up as we become more familiar with the working.

PORT SANITARY INSPECTION.

As in 1909, this work has been carried out in a routine manner by Mr. Watson, to whom the work is instructed. In his report, which is appended, full details of the number of vessels, etc., are recorded. No cases of illness have been reported from any vessels entering the port. Arrangements have been made for dealing with possible introductions of Cholera from any of the Baltic ports.

SANITARY INSPECTOR'S REPORT.

TOWN HALL CHAMBERS,

TORQUAY,

January 5th, 1911.

PORT SANITARY INSPECTION.

*To His Worship the Mayor and to the Aldermen and
Councillors of the Borough of Torquay.*

GENTLEMEN,

I have pleasure in presenting this my Second Annual Report, giving details of the work carried out in connection with my duties as Port Sanitary Inspector, during the year ending December 31st, 1910.

As far as possible the inspection of all vessels entering this Port is carried out as a matter of routine.

During the year some 101 vessels have been boarded and inspected, and of these 15 were foreign.

In considering these figures, it is necessary to bear in mind that many of the vessels trade here at regular intervals, and it is only considered necessary to examine them periodically; there are also a considerable number of high-class steam yachts using this Port during the summer, and these are not likely to be kept in any but a satisfactory condition.

SUMMARY FOR THE YEAR 1910.

| | | | | |
|--|-----|---------|-----|-----------|
| Number of vessels inspected | ... | British | 86 | |
| | | Foreign | 15 | Total 101 |
| Number of crew carried | .. | ... | ... | 938 |
| „ passengers carried (excluding pleasure steamers) | | | | 166 |
| „ passengers landed | ... | ... | ... | 42 |
| „ vessels on which defects were found | | | ... | 28 |
| „ „ with general cargo and passengers | | | ... | 17 |
| „ „ „ cargo of coals | | ... | ... | 48 |
| „ „ „ „ cement | | ... | ... | 11 |
| „ „ „ „ sand | | ... | ... | 6 |
| „ „ „ „ timber (all foreign) | | | ... | 6 |
| „ „ „ „ vegetables (all foreign) | | | | 5 |
| „ „ „ „ slates (four foreign) | | | ... | 5 |

LIST OF SANITARY DEFECTS.

13 dirty closets.

9 dirty crew quarters.

3 ventilators in forecastle to be freed from packing.

1 leakage into forecastle.

1 dirty galley.

1 gear stored in forecastle.

In each instance these defects were notified to the master for remedy.

The only case of sickness reported or detected was one of colic, which proved to be nothing infectious.

I am, Mr. Mayor and Gentlemen,

Yours obediently,

W. B. WATSON,

Cert. R. San. Inst., Inspector to Riparian Sanitary Authority.

| NATURE OF WORK. (1) | OUTWORKERS' LISTS, SECTION 107. | | | | | | | | | | | OUTWORK IN UNWHOLESOME PREMISES, SECTION 108. | | | OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110. | | | |
|--|---|------------------------------|--------------------------|---------------------------|------------------------------|--------------------------|--|---|---|--|------------------------------------|--|-----------------------------|-----------------------------|--|-----------------------------|-----------------------------------|---|
| | Lists received from Employers. | | | | | | Addresses of Outworkers | | Notices served on Occupiers as to keeping or sending Lists. (10) | Prosecutions. | | Inspections of Outworkers' premises. (13) | In- stances. (14) | Notices served. (15) | Prosecutions. (16) | In- stances. (17) | Orders made (s. 110). (18) | Prosecutions (Sections 109, 110). (19) |
| | Sending twice in the year. | | | Sending once in the year. | | | Received from other Councils. (8) | Forwarded to other Councils. (9) | | Failing to keep or permit inspection of lists. (11) | Failing to send lists. (12) | | | | | | | |
| | Lists (2) | Outworkers. | | Lists. (5) | Outworkers. | | | | | | | | | | | | | |
| | | Con- tractors. (3) | Work- men. (4) | | Con- tractors. (6) | Work- men. (7) | | | | | | | | | | | | |
| Wearing Apparel— (1) making, &c. ... (2) cleaning and washing ... Lace, lace curtains, and nets ... Artificial flowers ... Nets, other than wire nets ... Tents ... Sacks ... Furniture and upholstery ... Fur pulling ... Feather sorting ... Umbrellas, &c. ... Carding, &c., of buttons, &c. ... Paper bags & boxes ... Basket making ... Brush making ... Racquet and tennis balls ... Stuffed toys ... File making ... Electro plate ... Cables and chains ... Anchors & grapnels ... Cart gear ... Locks, latches, and keys ... Pea picking ... Total ... | 18 < | | | | | | | | | | | | | | | | | |

The administration of the Factory and Workshop Act, 1901,
in connection with

FACTORIES, WORKSHOPS, WORKPLACES, & HOMEWORK.

1.--INSPECTION OF FACTORIES, WORKSHOPS, & WORKPLACES.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

| Premises. (1) | Number of | | |
|---|---------------------|----------------------------|----------------------|
| | Inspections. (2) | Written Notices. (3) | Prosecutions. (4) |
| Factories (Including Factory Laundries) | 30 | 11 | — |
| Workshops (Including Workshop Laundries) | 291 | 70 | Nil |
| Workplaces (Other than Outworkers' premises included in Part 3 of this Report.) | 66 | 23 | — |
| Total | 387 | 104 | — |

2.--DEFECTS FOUND IN FACTORIES, WORKSHOPS, & WORKPLACES.

| Particulars. (1) | Number of Defects. | | | Number of Prosecu- tions. (5) |
|---|--------------------|------------------|--|---|
| | Found. (2) | Remedied. (3) | Referred to H.M. Inspector. (4) | |
| <i>Nuisances under the Public Health Acts :—</i> | | | | |
| Want of cleanliness | 68 | 75 | — | — |
| Want of ventilation | 0 | 0 | — | — |
| Overcrowding | 2 | 1 | — | — |
| Want of drainage of floors | 0 | 0 | — | — |
| Other nuisances | 49 | 48 | 1 | — |
| Sanitary accommodation { insufficient | 9 | 2 | — | — |
| { unsuitable or defective | 14 | 16 | — | — |
| { not separate for sexes | 2 | 0 | — | — |
| <i>Offences under the Factory & Workshop Act :—</i> | | | | |
| Illegal occupation of underground bake- house (s. 101) | | | | |
| Breach of special sanitary requirements for bakehouses (ss. 97 to 100) | | | | |
| Other offences (Excluding offences relating to outwork which are included in Part 3 of this Report.) | | | | |
| Total | 144 | 142 | 1 | — |

4.—REGISTERED WORKSHOPS.

| Workshops on the Register (s. 131) at the end of the year. | | | | | Number. |
|---|---------------------------------------|----|----|----|---------|
| (1) | | | | | (2) |
| Important classes of work-shops, such as workshop bakehouses, may be enumerated here. | Laundries.. | .. | .. | .. | 105 |
| | Dressmakers and Milliners | .. | .. | .. | 63 |
| | Tailors | .. | .. | .. | 44 |
| | Bakers, &c. . . | .. | .. | .. | 52 |
| | Total number of workshops on Register | | | | 431 |

5.—OTHER MATTERS.

| Class. | | | | | Number. |
|--|----|----|----|----|---------|
| (1) | | | | | (2) |
| Matters notified to H.M. Inspector of Factories — | | | | | |
| Failure to affix Abstract of the Factory and Workshop Act (s. 133) | | | | | 30 |
| Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5) | | | | | |
| Notified by H.M. Inspector | | | | | 2 |
| Report (of action taken) sent to H.M. Inspector | | | | | 2 |
| Other | .. | .. | .. | .. | 74 |
| Underground Bakehouses (s. 101) :— | | | | | |
| Certificates granted during the year | | | | | — |
| In use at the end of the year | | | | | 5 |

TABLE II.

VITAL STATISTICS OF SEPARATE LOCALITIES IN 1910 AND PREVIOUS YEARS.

45

| NAMES OF LOCALITIES. | 1.—TORRE. | | | | 2.—WALDON. | | | | 3.—UPTON. | | | | 4.—ELLACOMBE. | | | | 5.—STRAND. | | | | 6.—TORWOOD. | | | | 7.—ST. MARY-CH. | | | | 8.—BABBACOMBE. | | | | 9.—CHELSTON. | | | |
|--------------------------------|--|--------------------|---------------------|----------------------|--|--------------------|---------------------|----------------------|--|--------------------|---------------------|----------------------|--|--------------------|---------------------|----------------------|--|--------------------|---------------------|----------------------|--|--------------------|---------------------|----------------------|--|--------------------|---------------------|----------------------|--|--------------------|---------------------|----------------------|--|--------------------|---------------------|----------------------|
| YEAR. | Population estimated to middle of each year. | Births registered. | Deaths at all Ages. | Deaths under 1 year. | Population estimated to middle of each year. | Births registered. | Deaths at all Ages. | Deaths under 1 year. | Population estimated to middle of each year. | Births registered. | Deaths at all Ages. | Deaths under 1 year. | Population estimated to middle of each year. | Births registered. | Deaths at all Ages. | Deaths under 1 year. | Population estimated to middle of each year. | Births registered. | Deaths at all Ages. | Deaths under 1 year. | Population estimated to middle of each year. | Births registered. | Deaths at all Ages. | Deaths under 1 year. | Population estimated to middle of each year. | Births registered. | Deaths at all Ages. | Deaths under 1 year. | Population estimated to middle of each year. | Births registered. | Deaths at all Ages. | Deaths under 1 year. | Population estimated to middle of each year. | Births registered. | Deaths at all Ages. | Deaths under 1 year. |
| | a. | b. | c. | d. | a. | b. | c. | d. | a. | b. | c. | d. | a. | b. | c. | d. | a. | b. | c. | d. | a. | b. | c. | d. | a. | b. | c. | d. | a. | b. | c. | d. | a. | b. | c. | d. |
| 1904 .. | 3,871 | 51 | 55 | 5 | 3,586 | 42 | 49 | 4 | 4,364 | 94 | 84 | 13 | 5,956 | 126 | 86 | 16 | 3,154 | 52 | 52 | 11 | 3,669 | 21 | 40 | 2 | 3,337 | 47 | 52 | 6 | 3,289 | 63 | 38 | 4 | 2,624 | 34 | 26 | 3 |
| 1905 .. | 3,876 | 51 | 80 | 5 | 3,591 | 40 | 40 | 4 | 4,369 | 88 | 68 | 8 | 5,966 | 119 | 83 | 13 | 3,159 | 53 | 50 | 6 | 3,674 | 27 | 32 | 0 | 3,342 | 62 | 57 | 7 | 3,294 | 52 | 48 | 8 | 2,629 | 30 | 33 | 2 |
| 1906 .. | 3,881 | 51 | 62 | 4 | 3,596 | 42 | 42 | 3 | 4,374 | 104 | 88 | 15 | 5,976 | 133 | 85 | 18 | 3,164 | 53 | 43 | 9 | 3,679 | 38 | 41 | 4 | 3,347 | 49 | 61 | 6 | 3,299 | 58 | 44 | 1 | 2,634 | 38 | 33 | 1 |
| 1907 .. | 3,886 | 55 | 70 | 2 | 3,601 | 36 | 45 | 5 | 4,379 | 96 | 72 | 8 | 5,986 | 124 | 98 | 11 | 3,169 | 55 | 57 | 13 | 3,684 | 27 | 45 | 0 | 3,352 | 58 | 56 | 5 | 3,304 | 50 | 45 | 5 | 2,639 | 30 | 41 | 3 |
| 1908 .. | 3,891 | 58 | 91 | 8 | 3,606 | 29 | 51 | 3 | 4,384 | 92 | 82 | 11 | 5,996 | 130 | 110 | 24 | 3,174 | 53 | 69 | 14 | 3,689 | 35 | 41 | 4 | 3,357 | 59 | 61 | 5 | 3,309 | 43 | 62 | 2 | 2,644 | 25 | 35 | 4 |
| 1909 .. | 3,896 | 64 | 84 | 8 | 3,611 | 43 | 44 | 4 | 4,389 | 94 | 60 | 6 | 6,006 | 147 | 86 | 14 | 3,179 | 60 | 52 | 8 | 3,694 | 20 | 41 | 0 | 3,362 | 66 | 42 | 6 | 3,314 | 49 | 42 | 4 | 2,649 | 32 | 21 | 2 |
| Averages of Years 1904 to 1909 | 3,883 | 53 | 73 | 5 | 3,598 | 38 | 45 | 4 | 4,376 | 95 | 76 | 10 | 5,981 | 130 | 91 | 16 | 3,166 | 54 | 54 | 10 | 3,681 | 28 | 40 | 1 | 3,349 | 56 | 55 | 6 | 3,301 | 52 | 46 | 4 | 2,636 | 31 | 31 | 2 |
| 1910 .. | 3,896 | 45 | 72 | 8 | 3,611 | 30 | 39 | 2 | 4,386 | 104 | 72 | 7 | 6,026 | 127 | 104 | 13 | 3,179 | 59 | 51 | 9 | 3,694 | 39 | 51 | 3 | 3,367 | 57 | 47 | 3 | 3,324 | 53 | 67 | 8 | 2,654 | 25 | 37 | 1 |

NOTES.—(a) The separate localities adopted for this table should be areas of which the populations are obtainable from the census returns, such as wards, parishes or groups of parishes, or registration sub districts. Block 1 may, if desired, be used for the whole district; and blocks, 2, 3, &c., for the several localities. In small districts without recognised divisions of known population this Table need not be filled up.

(b) Deaths of residents occurring in public institutions beyond the district are to be included in sub-columns c of this Table, and those of non-residents registered in public institutions in the district excluded. (See note on Table I. as to meaning of terms "resident" and "non-resident.")

(c) Deaths of residents occurring in public institutions, whether within or without the district, are to be allotted to the respective localities according to the addresses of the deceased.

(d) Care should be taken that the gross totals of the several columns in this Table respectively equal the corresponding totals for the whole districts in Tables I. and IV.: thus, the totals of sub-columns a, b, and c should agree with the figures for the year in the columns 2, 3, and 12 respectively of Table I.: the gross total of the sub-columns c should agree with the total of column 2 in Table IV., and the gross total of sub-columns d with the total of column 3 in Table IV.

TABLE I.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1910 AND PREVIOUS YEARS.

| YEAR. | Population estimated to Middle of each Year. | BIRTHS. | | Total Deaths Registered in the District. | | | | | TOTAL DEATHS IN PUBLIC INSTITUTIONS IN THE DISTRICT. | Deaths of Non-Residents registered in Public Institutions in the District. | Deaths of Residents registered in Public Institutions beyond the District. | NETT DEATHS AT ALL AGES BELONGING TO THE DISTRICT. | |
|-------------------------------|--|---------|--------|--|-----------------------------------|--------------|--------|----|--|--|--|--|--------|
| | | Number. | Rate.* | Under 1 year of age | | At all ages. | | | | | | Number. | Rate.* |
| | | | | Number. | Rate per 1,000 Births registered. | Number. | Rate.* | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | |
| 1900. | 33600 | 559 | 16.6 | 70 | 124 | 488 | 14.5 | 41 | 58† | | 430 | 12.8 | |
| 1901. | 33825 | 556 | 16.5 | 70 | 125 | 504 | 15.0 | 51 | 28 | | 476 | 14.1 | |
| 1902. | 33625 | 540 | 16.0 | 84 | 155 | 529 | 15.7 | 63 | 38 | | 491 | 14.6 | |
| 1903. | 33800 | 536 | 15.9 | 51 | 95 | 455 | 13.4 | 57 | 28 | 21 | 448 | 13.3 | |
| 1904. | 33850 | 530 | 15.7 | 64 | 120 | 473 | 13.9 | 42 | 20 | 29 | 482 | 14.2 | |
| 1905. | 33900 | 522 | 15.4 | 50 | 101 | 473 | 13.9 | 46 | 12 | 31 | 491 | 14.5 | |
| 1906. | 33950 | 566 | 16.6 | 61 | 107 | 478 | 13.9 | 50 | 19 | 43 | 499 | 14.6 | |
| 1907. | 34000 | 537 | 15.8 | 52 | 97 | 519 | 15.3 | 54 | 18 | 28 | 529 | 15.5 | |
| 1908. | 34050 | 524 | 15.4 | 73 | 139 | 580 | 17.0 | 48 | 19 | 41 | 602 | 17.6 | |
| 1909. | 34100 | 575 | 16.8 | 53 | 92 | 452 | 13.2 | 52 | 19 | 39 | 472 | 13.8 | |
| Averages for years 1900—1909. | 33850 | 545 | 16.1 | 62 | 115 | 496 | 14.6 | 50 | 26 | — | 492 | 14.5 | |
| 1910. | 34150 | 539 | 15.8 | 53 | 98.3 | 517 | 15.1 | 44 | 18 | 41 | 540 | 15.8 | |

* Rates in columns 4, 8, and 13 calculated per 1,000 of estimated population.

† Include deaths of all visitors.

TABLE III.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE
YEAR 1910.

| NOTIFIABLE DISEASE. | Cases notified in whole district. | | | | | | Total cases notified in each locality. | | | | | | | | No. of cases removed to hospital fr'm each locality | | | | | | Total cases removed to Hospital. | | | | |
|-------------------------|-----------------------------------|----------------|--------|---------|----------|----------|--|--------|-------|-----------|--------|---------|------------|----------|---|-------|--------|-------|-----------|--------|----------------------------------|---------|------------|----------|----------|
| | At all ages. | At Ages—Years. | | | | | Torre | Waldon | Upton | Ellacombe | Strand | Worwood | S. Marych. | Babe'mbe | Chelston | Torre | Waldon | Upton | Ellacombe | Strand | | Torwood | S. Marych. | Babe'mbe | Chelston |
| | | Under 1 | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 65 | | | | | | | | | | | | | | | | | | | |
| Small-pox .. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Cholera .. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Diphtheria, incl'd'g .. | 58 | 16 | 36 | 4 | 2 | — | 2 | 1 | 3 | 13 | 1 | 4 | 10 | 18 | 6 | 2 | 1 | — | 10 | 1 | 4 | 10 | 16 | 6 | 50 |
| Membranous croup .. | 6 | — | — | — | 5 | 1 | — | — | — | 2 | — | 1 | 2 | 1 | — | — | — | — | — | — | — | — | — | — | — |
| Erysipelas .. | 58 | 17 | 28 | 6 | 7 | — | 2 | 2 | 8 | 17 | 13 | 3 | 6 | 6 | 1 | 2 | 2 | 8 | 14 | 13 | 3 | 5 | 2 | — | 49 |
| Scarlet fever .. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Typhus fever .. | — | — | — | — | 1 | — | — | — | — | — | — | — | — | 1 | — | — | — | — | — | — | — | — | — | — | — |
| Enteric fever .. | 1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Relapsing fever .. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Continued fever .. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Puerperal fever .. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Plague .. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Totals .. | 123 | 33 | 64 | 10 | 15 | 1 | 4 | 3 | 11 | 32 | 14 | 8 | 18 | 26 | 7 | 4 | 3 | 8 | 24 | 14 | 7 | 15 | 18 | 6 | 99 |

NOTES.—The localities adopted for this table are the same as those in Tables II. and IV.

Isolation Hospital :—Newton Abbot Road, outside the Borough.

| CAUSES OF DEATH. | Deaths at the subjoined ages of Residents whether occurring in or beyond the District. | | | | | | Deaths at all ages of Residents belonging to Localities, whether occurring in or beyond the District. | | | | | | Total Deaths whether of Residents or non Residents in Public Institutions in the District | | | | |
|--|---|-----------------|--------------------------|-----------------------|----------------------|----------------------|--|--------|--------|--------|------------------|---------|---|---------|---------------------|-----------------|----------|
| | All ages. | 1 under 1 | 1 and 5 under 5 | 5 and under 15. | 15 & under 25. | 25 & under 65. | 65 & up- wards | Torre. | Waldon | Upton. | Ellis- combe. | Strand. | | Torwood | S. Mary. Church. | Babb- combe. | Chelston |
| Small-pox .. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Measles .. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Scarlet Fever .. | 1 | 1 | 2 | — | 1 | — | — | 1 | — | — | 1 | 2 | — | — | — | — | |
| Whooping-cough .. | 3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Diphtheria and Membranous croup .. | 9 | — | 3 | 5 | 1 | — | — | 1 | — | — | 4 | — | 2 | 1 | — | 1 | |
| Croup .. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Fever { Typhus | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Enteric | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Other continued | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Epidemic influenza .. | 7 | — | — | — | — | 3 | 4 | 2 | — | 1 | 1 | — | 1 | 1 | 1 | — | |
| Cholera .. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Plague .. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Diarrhoea .. | 3 | 3 | — | — | — | 1 | 1 | — | — | — | 2 | 1 | 1 | — | — | — | |
| Enteritis .. | 2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Puerperal fever .. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Erysipelas .. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Phthisis (Pulmonary Tuberculosis) .. | 53 | — | — | — | 9 | 38 | 6 | 9 | 6 | 3 | 11 | 6 | 5 | 3 | 6 | 4 | |
| Other tubercular diseases | 5 | 2 | — | 1 | 1 | — | 1 | — | 2 | 4 | 1 | 1 | 4 | 2 | 1 | — | |
| Cancer, malignant disease | 45 | — | — | — | — | 24 | 21 | 5 | — | — | 6 | 6 | — | 5 | 9 | — | |
| Bronchitis .. | 40 | 4 | 2 | — | — | 9 | 25 | 4 | 5 | 10 | 4 | 5 | 1 | 3 | 6 | 2 | |
| Pneumonia .. | 22 | 5 | 1 | 1 | — | 8 | 7 | 3 | — | 1 | 5 | 4 | 3 | 2 | 3 | 1 | |
| Pleurisy .. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Other diseases of respiratory organs .. | 9 | — | — | — | — | 3 | 6 | — | 1 | 2 | 1 | 1 | 2 | 1 | — | 1 | |
| Alcoholism .. | 6 | — | — | — | — | 4 | 2 | — | — | — | — | 2 | 3 | — | 1 | — | |
| Cirrhosis of liver } | — | — | — | — | — | — | — | 3 | 1 | 1 | 5 | — | 2 | 1 | 1 | — | |
| Venereal diseases | | | | | | | | | | | | | | | | | |
| Premature birth .. | 14 | 14 | — | — | — | — | — | 3 | 1 | 1 | — | — | 2 | 1 | — | — | |
| Diseases and accidents of parturition .. | — | — | — | 1 | 1 | 7 | — | 3 | 1 | 2 | 2 | — | 2 | 2 | 3 | 1 | |
| Heart diseases .. | 16 | — | — | 2 | — | 3 | 4 | — | 2 | 2 | 1 | 1 | — | 1 | 2 | 3 | |
| Accidents .. | 10 | 1 | — | — | — | 3 | — | — | 2 | 3 | — | — | — | 1 | — | — | |
| Suicides .. | 4 | — | — | — | — | — | — | — | — | 43 | 59 | 22 | 25 | 24 | 34 | 22 | |
| All other causes .. | 291 | 25 | 7 | 4 | 6 | 84 | 165 | 41 | 21 | 43 | 59 | 22 | 25 | 24 | 34 | 22 | |
| All causes .. | 540 | 55 | 15 | 14 | 20 | 187 | 249 | 72 | 39 | 72 | 104 | 51 | 51 | 47 | 67 | 37 | 44 |

TABLE V.

INFANTILE MORTALITY DURING THE YEAR 1910.

DEATHS FROM STATED CAUSES IN WEEKS AND MONTHS UNDER ONE YEAR OF AGE.

| CAUSE OF DEATH. | | | | Under 1 Week. | 1-2 Weeks. | 2-3 Weeks. | 3-4 Weeks. | Total under 1 Month. | 1-2 Months. | 2-3 Months. | 3-4 Months. | 4-5 Months. | 5-6 Months. | 6-7 Months. | 7-8 Months. | 8-9 Months. | 9-10 Months. | 10-11 Months. | 11-12 Months. | Total Deaths under One Year. |
|-----------------------------|--|----|----|---------------|------------|------------|------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|------------------------------|
| ALL CAUSES. | Certified | .. | .. | 16 | 2 | 6 | 2 | 26 | 5 | 5 | 2 | 3 | 2 | 3 | 1 | 2 | 3 | 1 | - | 53 |
| | Uncertified | .. | .. | 1 | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | 1 |
| Common Infectious Diseases. | Small-pox | .. | .. | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Chicken-pox | .. | .. | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Measles | .. | .. | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Scarlet Fever | .. | .. | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Diphtheria: Croup | .. | .. | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Diarrhoeal Diseases. | Whooping Cough | .. | .. | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | 1 |
| | Diarrhoea, all forms | .. | .. | - | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 1 |
| | Enteritis, Mucro-enteritis, Gastro-enteritis | .. | .. | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Gastritis, Gastro-intestinal Catarrh | .. | .. | - | - | - | 1 | 1 | - | - | 1 | 1 | - | - | - | - | - | - | - | 3 |
| | Premature Birth | .. | .. | 9 | 1 | 2 | 1 | 13 | - | - | - | - | - | - | - | - | 1 | - | - | 14 |
| Wasting Diseases. | Congenital Defects | .. | .. | 6 | - | - | - | 6 | - | - | - | - | - | - | - | - | - | - | - | 6 |
| | Injury at Birth | .. | .. | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Want of Breast-milk, Starvation | .. | .. | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Atrophy, Debility, Marasmus | .. | .. | 1 | 1 | 1 | - | 3 | 2 | 1 | - | 1 | - | - | - | - | - | - | - | 7 |
| | Tuberculous Meningitis | .. | .. | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | 1 |
| Tuberculous Diseases. | Tuberculous Peritonitis: Tabes Mesenterica | .. | .. | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Other Tuberculous Diseases | .. | .. | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | 1 |
| | Erysipelas | .. | .. | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Syphilis | .. | .. | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Rickets | .. | .. | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 |
| Other Causes. | Meningitis (not Tuberculous) | .. | .. | - | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - | 1 |
| | Convulsions | .. | .. | - | - | 1 | - | 1 | 1 | 1 | - | - | 1 | 1 | - | 1 | - | - | - | 6 |
| | Bronchitis | .. | .. | - | - | - | - | - | - | 2 | - | - | - | - | - | 1 | 1 | - | - | 4 |
| | Laryngitis | .. | .. | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Pneumonia | .. | .. | - | - | - | - | - | - | - | 1 | - | 1 | 1 | - | - | - | 1 | - | 4 |
| | Suffocation, overlaying | .. | .. | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | 1 |
| | Other Causes | .. | .. | 1 | - | 2 | - | 3 | - | - | - | - | - | - | - | - | - | - | - | 3 |
| | | | | 17 | 2 | 6 | 2 | 27 | 5 | 5 | 2 | 3 | 2 | 3 | 1 | 2 | 3 | 1 | - | 54 |

District (or Sub-Division) of NEWTON ABBOT.

POPULATION.

Births in the year { legitimate - 516.
illegitimate - 23.

Estimated to middle of 1908.
34,150.

Deaths from ALL CAUSES AT ALL AGES, 540.

BOROUGH OF TORQUAY.

SANITARY INSPECTORS' REPORTS.

CHIEF SANITARY INSPECTOR'S REPORT.

TOWN HALL CHAMBERS, TORQUAY,

31st January, 1911.

*To the Worshipful the Mayor, Aldermen, and Councillors
of the Borough of Torquay.*

GENTLEMEN,

I have the unique privilege of presenting to you, as the Urban Sanitary Authority, this my thirty-third Annual Report.

Perhaps I may be permitted to observe that for fourteen years, from 1878, the Local Board of Health received such reports; whilst from 1892, when the town became incorporated, to 1900, they were laid before the Council, and since then submitted to the enlarged governing body.

Sanitary duty carried out in the Wards of Torre, Waldon, Chelston, and parts of the Strand and Upton, has been of the usual nature prevailing now for some years, except that thorough house-to-house visitation has been made of some of the poorer quarters of the Strand and Waldon Wards, to which detailed reference will be made later on.

Twenty-two Sanitary Certificates were granted, as compared with twenty-three in 1909. Fourteen fees were received.

Four hundred and eighty new cases were placed on the books, an excess of one hundred and seventy over the number in the previous year. Of these there were one hundred and forty-four thorough house inspections, where one hundred and thirteen testing experiments were carried out, or twenty-seven more than in 1909.

Urgent and special drainage work was imperative at a house in East Street. Torre, where frequent illness took place, and on investigation it was found that sewage made its way into the cellars and saturated the floors. Part of the leakage was traced to a defect in the sewer in the road, but the bulk was, after much trouble, found to come from the drains of two houses on the opposite side of the road. At my request the Borough Surveyor laid a new drain for these premises under the roadway and through one hundred feet of rock. The whole work was done, and the road ready for use, within the limits of one working day, and reflected great credit on all concerned.

DETAILS OF SANITARY OPERATIONS.

I have extracted from the records the following details of the type of sanitary work executed on the premises which came under observation : —

- 27 New sanitary conveniences were fixed.
- 27 Flushing cisterns were supplied.
- 28 New sets of house drains were laid.
- 69 Intercepting and gully traps.
- 24 Inspection chambers were built.
- 15 Fresh air inlets were provided.
- 19 Soil pipes were ventilated.
- 8 Old masons' traps were abolished.
- 23 Blocked drains were cleared.
- 8 Yards were paved and drained.
- 11 Rooms provided with better light and ventilation.
- 47 Premises were cleansed and limewashed.
- 37 Rooms were fumigated after infectious diseases.
- 14 Damp premises were remedied.
- 11 Waste pipes disconnected from drains.
- 24 Offensive accumulations were removed.
- 4 Ash bins provided in lieu of old pits.
- 8 Dirty tanks were cleaned out and covered.
- 6 New supplies of drinking water from mains.

- 2 New urinals were provided, or rather one; a public convenience in Market Street was, on my report to the Borough Surveyor, thoroughly re-modelled and well lighted, flushed, and ventilated.

Disinfectants were supplied to 1,069 persons for use in washing floors, etc., and eventually deodorized the drains, a most desirable object in hot weather.

- 277 Letters, notices, or reports were written or prepared during the year, as well as complete records of all official transactions.

Sketch plans of the position of the drains of any premises re-drained or altered have been drawn after careful survey, and are always available for reference. This work has proved very useful in the changing of ownership or tenancy, and especially with regard to the larger villas, which have frequently very complicated systems of drainage.

DISTRICT INSPECTION.

House to house inspections were carried out in Melville Street, Swan Street, and Lower Union Lane, numbering in all, fifty-nine houses, comprising eighty-five tenements, occupied by 268 persons.

Swan Street, which at the commencement of my tenure of office, was fully inhabited by persons engaged at the coal and fish quays, has become depopulated, only five houses, occupied by as many families, now remain in use. The older cottages have been swept away, and stores and stables for the large shops on the Strand now occupy the sites.

Insanitary conditions, viz., defective w.c.'s, sinks, and drains, were discovered in a few cases. The want of cleansing and lime-washing was pretty general, and badly situated tanks for drinking water were found in several cases; these have been cleaned out, and in addition, taps from the water main supplied. One over-crowding case was found. Letters were written to the owners or agents specifying defects found, and remedial measures suggested, and in every case, I am pleased to state, the work was done, and no recourse to legal notices or procedure was requisite. A like condition has, fortunately, prevailed for many years.

BAKEHOUSES INSPECTION.

The number of bakehouses is the same as in 1909, viz., sixteen. They were found in very good condition, evidently cleansed and limewashed just previous to the inspection, though no warning as to same had been given.

MARINE STORES.

Only two marine stores exist, both of them in the Waldon Ward. The chief difficulty is with regard to keeping down the large deposits of bones, which in a close neighbourhood cause a nuisance. A bi-monthly inspection, however, minimises the chance of any annoyance.

CONDEMNATION OF FISH.

Late one evening in the summer, I was requested by a detective police officer to proceed to a fish shop at Torre, to examine a quantity of cod and other fish received that day from Grimsby. On examination, I had no hesitation in pronouncing the fish unsound and unfit for human food, and it was forthwith destroyed. As it had been ordered for consumption at the approaching Regatta, it will be conceded that the correct thing was promptly done.

COWSHEDS, MILKSHOPS, AND DAIRIES.

The milkshops and dairies in Torre, Waldon, and Chelston, and parts of Strand and Upton Wards, number twenty-five, and were duly inspected in May and December. They were found quite satisfactory. Also nine cowsheds at farms situated at Cockington, outside the Borough boundary, were visited, and certain structural defects found at three places, which I pointed out by letter to the estate steward, who promised to deal with the matters as soon as it was possible. The sheds generally were found in clean order, and the usual limewashing done.

COMMON LODGING HOUSES.

There are now two common lodging houses, both situated in the Strand Ward. One has been licensed during the year. As it was a resort for poor travellers, it was considered the right thing to keep it under sanitary supervision. Structurally it was well adapted for the purpose. Both were found at frequent visits to be clean and the rules observed.

SANITARY CONFERENCE IN LONDON.

From 29th August to 3rd September last year, the twenty-fifth Annual Conference of the Sanitary Inspectors' Association was held in London at Fishmongers' Hall, London Bridge, under the presidency of Sir James Crichton Browne, F.R.S., LL.D.,

when several papers on sanitary subjects were read and discussed: also visits paid to the great meat and fish markets, margarine factory, biscuit works, model dairy and farm; and to new elementary schools, sanatorium, and sewage works at Ealing.

A detailed report of all the proceedings was prepared and submitted by your delegates in September, to the Sanitary Committee, and is entered in the Minutes of the Council, as well as, having been printed for circulation.

I submit, therefore, that the Conference was highly interesting and instructive, and must have a beneficial effect in perfecting knowledge by practical lessons on the scenes of sanitary operations, and by communing with representatives of local authorities from all over England, as well as with sanitary officers engaged in very diverse districts, the results of whose experiences were extremely valuable.

I very heartily thank the Council for appointing me a co-delegate to the Conference with the Chairman of the Sanitary Committee, Mr. Councillor R. F. Yeo, and remain,

Yours most obediently,

CHAS. MACMAHON, C.E.,

*C.R. San. Inst., Assoc. Mem. B. Inst. P. Health,
Chief Sanitary Inspector.*

SANITARY INSPECTOR'S REPORT.

TOWN HALL CHAMBERS,

ARCADE, TORQUAY,

January 10th, 1911.

*To His Worship the Mayor and to the Aldermen and
Councillors of the Borough of Torquay.*

GENTLEMEN,

I beg to present this my Thirteenth Annual Report to the Council for the year ending December 31st, 1910, dealing with that portion of the Borough under my direct supervision, viz.: the Wards of Torwood, Strand, Upton, and Ellacombe.

COMPLAINTS.

One hundred and thirty-eight houses and premises have been visited on receipt of complaint, or by request; and in the course of investigations dealing with the same, forty-four smoke and twenty-one hydraulic tests were applied to drains in various instances.

One hundred and sixteen notices were served to abate the nuisances found, and of these one hundred and five were of a preliminary nature and eleven statutory. I am glad to be able to state that in no instance was it found necessary to take proceedings.

In connection with the notices served, one hundred and sixty-four visits of inspection were made to the premises where work was in progress: and also seventy smoke and forty-eight hydraulic tests applied to the drains in various instances.

SANITARY CERTIFICATES.

Acting upon applications made by the owners or occupiers of premises to obtain Sanitary Certificates, twenty-nine houses were examined and reported upon, and on completion of such work as was found necessary to comply with the Council's special requirements, Certificates were granted in twenty-six instances.

Included in this list are two Certificates granted for premises examined at the end of the year 1909.

In each case the 10s. testing fee was paid—a total of £14 10s.

In connection with this work, sixty-nine smoke and fifty-two hydraulic tests were applied, and twenty-five visits of inspection paid while work was in progress.

DISTRICT INSPECTION.

House to house inspection has been made of forty-two houses and premises situate in the following Wards, viz:—

| | | | | |
|-----------|-----|----|---|----|
| Strand | ... | 20 | } | 42 |
| Upton | ... | 14 | | |
| Ellacombe | ... | 8 | | |

In connection with this work, forty-nine notices were given for the following matters:—

- 10 for Dirty walls and ceilings of living rooms and passages
- 9 „ Want of receptacles for house refuse
- 8 „ *Cellar dwellings
- 5 „ Defective w.c. cisterns
- 3 „ Accumulation of refuse
- 3 „ Overcrowding
- 3 „ Dirty drinking water cisterns
- 2 „ Dirty and defective w.c's.
- 2 „ Defective roofs
- 1 „ Choked drain
- 1 „ Defective waste from sink
- 1 „ Accumulation of manure
- 1 „ Keeping of Fowls

*These rooms, situate on premises in Upton, were on inspection found not to comply with the requirements of Section

72 of the Public Health Act, 1875, in regard to the following :—

“The rooms not being three feet of their height above the surface of the
“street adjoining or nearest the same, and outside of and adjoining which
“and extending along the entire frontage thereof, and upwards from six
“inches below the level of the floor thereof up to the surface of the street
“there was not an open area of at least two feet six inches wide in every
“part.”

Therefore, on notice being served upon the owners, these rooms were closed for habitation.

DETAILS OF OPERATIONS CARRIED OUT FOR THE ABATEMENT OF NUISANCES.

- 25 New drains laid to houses and other premises
- 11 Defective drains „ „ „ „ „ repaired
- 14 Drains ventilated at head of system
- 14 Choked drains cleared
- 3 Old masonry drains found and abolished
- 2 Old mason's traps abolished
- 29 Old iron and masonry traps removed and earthenware gullies fixed
- 16 Intercepting traps with fresh air inlets fixed
- 58 Inspection chambers to drains built
- 7 Soil pipes fixed outside buildings and ventilated
- 29 New sanitary conveniences with water supply fixed
- 3 Water supply laid on direct from main to taps over sinks
- 5 Cisterns cleansed
- 18 Defective w.c. cisterns repaired, or new provided
- 40 Waste pipes from baths, lavatories, and sinks trapped
- 19 Offensive accumulations removed
- 10 Ashbins provided
- 7 Nuisances abated from keeping fowls and animals
- 13 „ „ „ „ „ stables and manure pits
- 75 Rooms disinfected
- 16 Dirty premises limewashed and cleansed
- 6 Cases of overcrowding abated
- 8 Cellar dwellings closed
- 18 Other matters

DAIRIES, COWSHEDS, AND MILKSHOPS.

The half-yearly inspection of forty-four dairies, cowsheds, and milkshops within my district, has been carried out during the month of May and again in November. Generally speaking, these premises have been kept in a satisfactory condition, but occasionally, more especially in the summer, a caution has had to be given with regard to the better protection of the milk.

There is also a large quantity of milk supplied to Torquay from farms outside the Borough, and the dairies and cowsheds on thirty-three of these farms situate in the following districts :

| | | |
|----------|----------------|---------|
| Brent | Marldon | Dainton |
| Totnes | Abbotskerswell | Aller |
| Paignton | Kingskerswell | |

have, as in former years, been visited and inspected during the month of June and again in December. The cleanliness and general condition of the cowsheds was satisfactory.

PUBLIC ELEMENTARY SCHOOLS.

Sixty-four visits have been paid and inspections made as to the condition of the sanitary conveniences at the following Schools :—

| | | |
|-----------------|-----------------|------------------|
| Upton C.E. | Ellacombe C.E. | Torwood C.E. |
| St. James' C.E. | St. John's C.E. | Torquay National |

In nine instances, various defects were found, and, in accordance with the usual custom in these cases, the Education Secretary was notified to report to the Managers to remedy.

COMMON LODGING HOUSES.

The six registered Common Lodging Houses coming under my supervision have been periodically visited and inspected during the year.

The registered total accommodation is for eighty-nine persons.

One house changed hands, and one new one was registered during the year.

In the early part of the year, nine houses suspected as being used as Common Lodging Houses were visited, but on investigation only one was found to be so used. Notice was served on the keeper and the same was then duly registered.

In connection with these premises, the following notices were given, viz. :—

| | |
|---|--|
| 3 | Notices to provide extra w.c. accommodation |
| 3 | „ „ Partition off rooms for married couples. |
| 2 | „ „ Cleanse and limewash |
| 2 | „ „ Repair defective w.c. cisterns |
| 1 | „ „ Re-pave yard |
| 1 | „ „ Remove fowls |

BAKEHOUSES.

During the year, inspection has been made of the nineteen premises on the register.

Generally speaking, lime-washing and cleansing has been well carried out, a verbal notice being found sufficient to get this work done where necessary.

ICE CREAM.

There is only one small establishment where the manufacture of Ice Cream is carried on, *i.e.* in Upton, and this place has been visited and inspected and found satisfactory.

TRIPE BOILING.

The establishment in Upton where this trade is carried on has been visited from time to time and found in a satisfactory condition.

DEALERS IN OLD METAL AND MARINE STORES.

Under section 86 of the Public Health Acts Amendment Act, 1907, all persons carrying on this trade, and their place of business, must be registered.

Four such premises are now registered and have been constantly visited and inspected, and taking into consideration the nature of the trade carried on, they have been kept in a satisfactory condition, although in five instances it was found necessary to give notice for linewashing and for removal of bones, and in one instance to rectify w.c. accommodation.

FRENCH ONION HAWKING.

The premises occupied, both as stores and living quarters, by these hawkers, who spend a large portion of each year in Torquay, have been inspected and found suitable for the purpose.

In one instance it was found necessary to serve notice on the owner of the premises with regard to the sanitary arrangements.

INFECTIOUS DISEASE AND DISINFECTION.

With regard to work in connection with Infectious and other Diseases, seventy-five rooms in various houses were disinfected after the following cases:—

| | | | |
|---------------|----|----------------|----|
| Scarlet Fever | 31 | Phthisis | 14 |
| Diphtheria | 10 | Whooping Cough | 2 |
| Measles | 19 | | |

This included disinfection at a Public School after an outbreak of Measles.

In four instances, the drains to premises were, upon examination and testing, found defective and were re-laid.

As in former years, offers to disinfect were made in every instance after death or removal of cases of Phthisis, but being an optional matter with the occupier of the house, this is often refused.

During the year, eighteen rooms were disinfected after fifteen cases, and in three other instances the offer was refused.

The following table will shew the result for the last ten years :—

| Year. | No. of Cases. | No. of Disinfections. | Refusals. |
|-------|---------------|-----------------------|-----------|
| 1901 | 45 | 14 | 31 |
| 1902 | 25 | 9 | 16 |
| 1903 | 12 | 0 | 12 |
| 1904 | 20 | 8 | 12 |
| 1905 | 17 | 9 | 8 |
| 1906 | 15 | 9 | 6 |
| 1907 | 6 | 5 | 1 |
| 1908 | 21 | 13 | 8 |
| 1909 | 11 | 8 | 3 |
| 1910 | 18 | 15 | 3 |
| Total | 190 | 90 | 100 |

Office work has, during the year, demanded a considerable amount of time for the keeping of the necessary books and records of work, and in correspondence.

PORT SANITARY INSPECTION.

The details of work carried out under this head will be found on the accompanying Special Report.

I am, Mr. Mayor and Gentlemen,

Yours obediently,

WILLIAM B. WATSON,

Cert. Royal San. Inst. ; Sanitary Inspector.

SANITARY INSPECTOR'S REPORT.

TOWN HALL, ST. MARY-CHURCH,

January, 1911.

*To His Worship the Mayor, Aldermen, and Councillors of
the Borough of Torquay.*

GENTLEMEN,

I have pleasure in presenting to your Council my Second Annual Report, for the year ending December 31st, 1910, in connection with the St. Mary-Church and Babbacombe Wards, and the remainder of the Borough so far as the operations of the Factory and Workshop Act, 1901, and the inspection of meat and slaughter-houses is concerned.

This year I have classified, under their respective headings, the various subjects dealt with ; such classification showing at a glance the amount of work entailed and improvements made.

The principal matters dealt with during the year under review have been the inspection made in connection with the Factory and Workshop Act, and the inspection of the animals slaughtered for food in the slaughter-houses situated throughout the Borough. These subjects are fully dealt with under separate headings and tables.

INFECTIOUS AND OTHER DISEASES.

(TABLES A. & B.)

There has been a considerable increase in the number of premises dealt with in connection with infectious diseases and

other sicknesses. A total of eighty-two rooms was disinfected on fifty-seven different premises, including three schools.

TABLE A.

| DISEASE. | ROOMS. | DISEASE. | ROOMS. |
|-------------------------|--------|------------------|--------|
| Scarlet Fever | 14 | Measles | 6 |
| Cancer | 3 | Diphtheria | 36 |
| Phthisis or Consumption | 21 | Others | 2 |

In cases of consumption, an offer is made to disinfect the room. In only one instance was this offer to disinfect declined.

A sum of forty-one shillings has been received in fees for disinfecting rooms after cases of measles, operations, etc.

It is interesting to record that every assistance is given in investigating cases of infectious disease, and where it has been found necessary to relay or repair defective drains and remedy other defects, the work has been carried out either on verbal or written request. In only two instances was it found necessary to serve a preliminary notice.

TABLE B.

PREMISES VISITED AND IMPROVEMENTS MADE.

| | |
|--|----|
| Houses inspected | 53 |
| Houses visited | 63 |
| Dirty rooms linewashed or cleansed | 7 |
| Rooms disinfected, including 3 Schools | 82 |
| Defective floors repaired | 6 |
| Water supply laid to tap over sink | 5 |
| Defective yards paved | 7 |
| Rooms lighted or ventilated | 1 |
| R.W.P.'s and gutters repaired | 5 |
| Nuisances from keeping fowls and animals | 1 |
| Ashbins provided for house refuse | 4 |
| Ashpits repaired | 1 |

DRAINS TESTED.

| | |
|--|----|
| Smoke | 21 |
| Water | 4 |
| New sets of house drains laid | 3 |
| Defective house drains repaired | 2 |
| Old Masonry drains found and abolished | 1 |
| Intercepting traps with fresh air inlets fixed | 2 |
| Inspection chambers to drains built | 3 |
| Drains ventilated at head of system | 3 |
| New water closets with water supply fixed | 2 |
| Choked drains cleared | 1 |

| | | |
|--|-------|----|
| Defective w.c. cisterns repaired or provided | .. | 1 |
| W.C.'s repaired and cleaned | | 2 |
| Glazed stoneware sinks fixed | | 3 |
| Miscellaneous | | 4 |
| Re-visits in connection with this work | | 43 |
| Preliminary notices | | 2 |
| Letters written | | 27 |
| Schools disinfected | | 3 |

HOUSE TO HOUSE INSPECTIONS AND INSPECTIONS MADE UNDER THE HOUSING, TOWN PLANNING ACT, 1909.

(TABLE C.)

It was hoped that during the early months of the year a considerable number of the more dilapidated dwelling-houses would have been brought under the operations of The Housing, Town Planning Act, but owing to the amount of work requiring attention in other directions it was found impossible to make a systematic inspection of any particular locality till the last few weeks of the year. However, during the spring I interviewed the owner of sixteen houses in Plainmoor and pointed out the necessity of thoroughly repairing the premises and making better provisions for the tenants. The work suggested has now been completed, the principal improvements being the rendering of the external walls in Portland cement, repairing the roofs and chimneys, gutters, rain water spouts, and the paving of the yards in Portland cement concrete. The erection of three wash-houses, the re-draining or providing of additional drainage to six houses, and the cleansing and repairing of the interiors of the sixteen houses. This work has necessitated considerable outlay but, considering the improvements made to the property, it is money well spent, and it is to be hoped that the conveniences provided will be appreciated by the tenants.

During December, the Medical Officer of Health and myself inspected nineteen houses in Babbacombe under The Housing, Town Planning Act. I have also applied the smoke test to the drains of ten separate premises, seven of which were found to be more or less defective. A number of other defects have also been discovered, but the whole of the details will be more fully dealt with when the district mapped out for inspection has been completed.

The outstanding feature so far observed in connection with this inspection is the want of a well-ventilated cupboard for the storage of food, the foul and dilapidated condition of the ash

accommodation, and the encroaching on the air space and yard area by the erection of pigeon and fowl houses and other out-buildings.

The replacing of these uncovered, unsuitable, and generally insanitary receptacles by the more sanitary covered galvanized iron ashbin has not been lost sight of, and in their contribution to the general air and food contamination, their use as a breeding ground for flies, and to the fact that cats and other vermin are attracted to them in their search for food among the refuse, it seems a matter for regret that their abolition should not be insisted on; but owing to the opposition offered, and the failure of property owners to recognise their responsibility in the matter, progress becomes very slow. Nevertheless, fifty-nine galvanized iron ash receptacles have been provided throughout the district during the year.

TABLE C.
PREMISES VISITED AND IMPROVEMENTS MADE.
HOUSES.

| | |
|--|-----|
| Houses Inspected or Visited | 187 |
| Dirty premises linewashed and cleansed .. | 49 |
| Cases of overcrowding abated | 2 |
| Defective floor repaired | 26 |
| Water supply laid to tap over sink | 14 |
| Defective yards re-paved | 24 |
| Lighted and ventilated rooms or work rooms .. | 7 |
| R.W.P.'s and gutters repaired | 18 |
| Nuisances from keeping fowls and animals .. | 6 |
| Ashbins provided for house refuse | 13 |
| DRAINS TESTED. | |
| Smoke | 8 |
| Water | 6 |
| New sets of house drains laid | 4 |
| Defective house drains repaired | 5 |
| Intercepting traps with fresh air inlets fixed .. | 2 |
| Old mason's traps abolished | 1 |
| Inspection chambers to drains built | 2 |
| Drains ventilated at head of system | 5 |
| New sanitary conveniences with water supply fixed .. | 3 |
| Soil pipes fixed outside buildings and ventilated .. | 1 |
| Iron & brick traps removed & earthenware gullies fixed | 8 |
| Choked drains cleared | 2 |
| Defective w.c. cisterns repaired or new provided .. | 5 |
| W.C.'s repaired and cleaned | 9 |
| Glazed sinks fixed | 5 |

MISCELLANEOUS.

| | | | |
|---|----|----|-----|
| Offensive accumulations removed | .. | .. | 9 |
| Nuisances from stables and manure pits abated | .. | | 2 |
| Waste of water reported | .. | .. | 1 |
| Miscellaneous | .. | .. | 54 |
| Re-visits in connection with above work | .. | .. | 61 |
| Legal notices served | .. | .. | 6 |
| Preliminary notices.. | .. | .. | 2 |
| Letters & communications on the business of the dept. | | | 159 |
| Visits made to Slaughter-houses | .. | .. | 528 |

COMPLAINTS.

(TABLE D.)

Thirty-three written complaints and a large number of verbal complaints respecting alleged nuisances and other matters have been received during the year.

These complaints arose mostly from offensive smells in connection with defective drains, the keeping of animals, as well as a number of other nuisances which do not come under the jurisdiction of the Public Health Acts. Two complaints arose from the annoyance caused by the barking of dogs, two from the burning of garden refuse, and two from the removal of manure during prohibited hours.

A letter enclosing a copy of the local Bye-laws was forwarded in each case, and this was found sufficient without taking further action in the matter.

Several complaints were received respecting the want of ash accommodation affecting thirteen new dwelling houses, and, on investigation, several other defects were discovered. After a considerable amount of trouble, some of the defects were remedied, but owing to change of ownership the matter has not yet been settled.

COMPLAINTS AND VISITS ON REQUEST.

TABLE D.

PREMISES VISITED AND IMPROVEMENTS MADE.

HOUSES.

| | | | | |
|---|----|----|----|----|
| Houses inspected | .. | .. | .. | 65 |
| Houses visited | .. | .. | .. | 80 |
| Dirty premises limewashed and cleansed | | | .. | 16 |
| Rooms disinfected on request | .. | .. | .. | 5 |
| Cases of overcrowding abated | .. | .. | .. | 2 |
| Defective floor repaired | .. | .. | .. | 3 |
| Water supply laid direct from main to tap over sink | | | | 1 |
| Defective yards re-paved | .. | .. | .. | 20 |

| | | |
|--|----|----|
| Lighted and ventilated rooms or work rooms | .. | 1 |
| R.W.P.'s and gutters repaired | .. | 7 |
| Nuisances from keeping fowls and animals | .. | 14 |
| Ashbins provided for house refuse | .. | 34 |

DRAINS TESTED.

| | | | | | |
|--|----|----|----|----|----|
| Smoke | .. | .. | .. | .. | 58 |
| Water | .. | .. | .. | .. | 19 |
| New sets of house drains laid | .. | .. | .. | 9 | |
| Defective house drains repaired | .. | .. | 10 | | |
| Old masonry drain found and abolished | .. | .. | 5 | | |
| Intercepting traps with fresh air inlets fixed | .. | 15 | | | |
| Old mason's traps abolished | .. | .. | 2 | | |
| Inspection chambers to drains built | .. | .. | 16 | | |
| Drains ventilated at head of system | .. | .. | 15 | | |
| New sanitary conveniences with water supply fixed | 13 | | | | |
| Soil pipes fixed outside buildings and ventilated | .. | 3 | | | |
| Iron & brick traps removed & earthenware gullies fixed | 30 | | | | |
| Waste pipes from baths, lavatories, and sinks trapped | 7 | | | | |
| Choked drains cleared | .. | .. | 9 | | |
| Defective w.c. cisterns repaired or new provided | .. | 16 | | | |
| W.C.'s repaired and cleaned | .. | .. | 9 | | |
| Cesspools cleaned | .. | .. | 1 | | |
| Glazed sinks fixed | .. | .. | 9 | | |

MISCELLANEOUS.

| | | | | | |
|---|----|-----|----|--|--|
| Offensive accumulations removed | .. | .. | 13 | | |
| Nuisances from stables and manure pits abated | .. | 9 | | | |
| Miscellaneous | .. | .. | 37 | | |
| Re-visits in connection with above work | .. | 148 | | | |
| Legal notices | .. | .. | 2 | | |
| Preliminary notices served | .. | .. | 19 | | |
| Letters & communications in connection with this work | 96 | | | | |
| Public Elementary Schools | .. | .. | 4 | | |
| Marine stores | .. | .. | 2 | | |

SANITARY CERTIFICATES.

(TABLE E.)

Five houses were examined and reports furnished. Five certificates have been granted. In one case the report was made during 1909, the work being completed in January, 1910.

Of the five houses reported on, the drainage of three were found to be more or less defective, requiring the laying down of a new system throughout and modern sanitary fittings substituted. In two instances the drains or fittings were found slightly defective owing to cracked pipes or defects in various fittings.

In one case the work is in progress, the premises in question being entirely re-drained.

TABLE E.
PREMISES VISITED AND IMPROVEMENTS MADE.
HOUSES.

| | |
|---|---|
| Houses inspected | 5 |
| Dirty premises limewashed and cleansed .. | 2 |
| Defective floor repaired | 5 |
| Water supply laid direct from main to tap over sink | 3 |
| Defective yards re-paved | 6 |
| R.W.P.'s and gutters repaired | 3 |
| Ashbins provided for house refuse | 2 |
| Ashpits repaired or provided | 1 |

DRAINS TESTED.

| | |
|--|----|
| Smoke | 27 |
| Water | 17 |
| New sets of house drains laid | 5 |
| Defective house drains repaired | 2 |
| Intercepting traps with fresh air inlets fixed .. | 5 |
| Old mason's traps abolished | 1 |
| Inspection chambers to drains built | 16 |
| Drains ventilated at head of system | 5 |
| New sanitary conveniences with water supply fixed | 12 |
| Soil pipes fixed outside buildings and ventilated .. | 3 |
| Iron & brick traps removed & earthenware gullies fixed | 20 |
| Waste pipes from baths, lavatories, and sinks trapped | 13 |
| Defective w.c. cisterns repaired or new provided .. | 11 |
| W.C.'s repaired and cleaned | 3 |
| Glazed sinks fixed | 4 |
| Lavatory basins fixed | 3 |

MISCELLANEOUS.

| | |
|---|----|
| Miscellaneous | 3 |
| Re-visits in connection with above work.. | 28 |
| Letters & communications in connection with this work | 38 |

DAIRIES AND COWSHEDS INSPECTED:

The twenty-eight dairies and eighteen cowsheds have been inspected twice during the year. In five instances it was found necessary to request the owners to limewash the cowsheds, and in two cases the matter had to be dealt with by the Town Clerk before this very necessary work was carried out.

I had occasion to complain to one dairyman of the dirty condition of a milk vessel in which milk was exposed for sale in the dairy.

Owing to the time at which the cattle are brought to the sheds for milking, it is seldom that the process of milking can be seen carried out, or if sufficient care is taken to see that the udders and teats of the cows and the hands of the milkers are clean, and the necessary precautions taken to supply milk free from contamination.

A total of seventy visits were paid to the dairies and cowsheds within the district.

The twenty-five dairy farms situated outside the Borough were inspected twice during the year by the Medical Officer of Health and myself, and were generally found clean and satisfactory.

One dairy and one cowshed have been discontinued, one dairy has changed hands and two dairies have been newly established.

MEAT AND SLAUGHTER-HOUSE INSPECTION.

(TABLES F & G.)

During the past twelve months a considerable amount of attention has been paid to the slaughter-houses in the Borough, and an effort has been made to visit the premises during the process of slaughtering, as it is absolutely necessary, to ensure adequate inspection of the carcasses and organs, that the inspection should be made during or immediately after the animal is dressed and before the removal from the slaughter-house of the internal organs.

In June, a Sub Committee was appointed to go into this matter, a special report being drawn up showing the number of visits paid, the number of carcasses examined, the quantity of diseased organs and meat destroyed, the difficulties met with in practice, and the insanitary condition of some of the premises.

The Committee subsequently visited the different slaughter-houses and suggested a number of alterations and repairs being carried out therein. This work was completed during the year, the principal items being as follows:—The internal walls of five being rendered in Portland cement with polished surfaces to a height of six feet, the floor of five being paved in Portland cement concrete, and the floors of three repaired; the interior walls linewashed, and notices painted up outside the buildings showing them to be “Licensed or Registered” slaughter-houses, &c.

The Committee sat again during November and another report was presented which included a scheme of inspection of the slaughter-houses and meat, and suggested amendments of the local bye-laws respecting the time of slaughtering, inspection, and other important matters. The Committee unanimously accepted the report and bye-laws and recommended to the Council that I be appointed Meat and Slaughter-house Inspector for the Borough. As this matter was not finally settled till December, the effects of a systematic inspection of the meat supply has not had time to be observed, but during the coming year frequent weekly visits will be paid to the Public Slaughter-house, and the contents of the various butchers' carts coming in from the outside districts will be examined.

To show there is some need for this inspection, I may mention that two articles of food purchased by different persons from tradesmen coming into the Borough were handed to me during the year. These proved upon examination to be unsound and unfit for food.

A local butcher was prosecuted during the year for having sold diseased meat, the defendant being fined £1 and £1 costs, or in default fourteen days imprisonment.

The question of slaughtering on unlicensed premises has also received attention. The essential point that has to be considered in connection with animals slaughtered on private premises is the carcasses or organs cannot be inspected, and the person who usually carries out the dressing is not sufficiently experienced to judge whether an animal is diseased or not, thus the danger arises of diseased food being sold to the public without any safeguard.

The condition under which the animals are dressed is usually far from sanitary, the killing generally being done in close proximity to the pigstye, and the dressing in the yard or out-building, which is frequently situated close to the water closet and ash heap, and the yard surface being in most instances unpaved, the blood and filth soaks into the earth, thus polluting the ground in the vicinity of the dwelling house; neither is there any means of preventing cruelty in the killing of the animals. It is therefore necessary, in the interest of the public, that this secret slaughtering should be checked where possible.

With a view to bringing this matter before the notice of the public, notices were posted up throughout the Borough (see

copy of notice below) pointing out the illegality of such practices. A butcher was also prosecuted for dressing a pig in a shed adjoining a stable.

BOROUGH OF TORQUAY.

SLAUGHTERING OF ANIMALS ON PREMISES OTHER THAN LICENSED OR REGISTERED SLAUGHTER-HOUSES.

It having come to the notice of the Urban Sanitary Authority that some persons are in the habit of slaughtering animals on premises which are neither Licensed nor Registered as Slaughter-houses, the carcasses of such animals, or some part thereof, being intended for sale, Notice is hereby given that this practice is contrary to law, and that any person found offending in this respect in future will be prosecuted.

FREDK. S. HEX, Town Clerk.

As I was occasionally in the neighbourhood of the Public Slaughter-house in connection with workshop inspection, the Medical Officer of Health requested me to visit the premises and examine the carcasses or organs found therein. In this way forty-three calls were made. The number of carcasses examined is included in the Table given below.

Four cases of localized tuberculosis was detected in three cows or heifers and one pig. The disease being slight in each case, only the affected organs were destroyed.

The principal diseases affecting the organs, &c., necessitating their destruction, have been cysts, abscess, liver flukes, cirrhosis, inflammation, congestion, strongyli, parasitic abscess, garget, pleurisy, and tuberculosis.

The approximate weight destroyed was 311 pounds.

Two Magistrate's Orders were obtained for the destruction of unsound or diseased food, the remaining one hundred and twenty-two articles were surrendered on request.

Naturally this work takes up a considerable amount of time, owing to the distance apart of the slaughter-houses and the time involved in the examination of the organs and carcasses the average being one hundred and thirty organs and carcasses in one afternoon.

A total of five hundred and twenty-eight visits have been made to the slaughter-houses during the year under review.

The following Tables show that this important subject is receiving a fair amount of attention, but it is impossible in Tables to adequately give a clear idea of the amount of work involved in dealing with meat inspection. At the same time it is not claimed that the inspection is perfect, neither does the amount of diseased food destroyed give any indication of the time spent in supervision, as it so frequently happens that the better the inspection the more it has a tendency to divert diseased cattle to other channels ; at the same time it tends to make tradesmen exercise more care in the purchase of their cattle.

DRESSED CARCASSES EXAMINED.

TABLE F.

| | | | | |
|------------------|----|----|----|------|
| Bullocks | .. | .. | .. | 74 |
| Cows and Heifers | .. | .. | .. | 140 |
| Calves | .. | .. | .. | 17 |
| Sheep | .. | .. | .. | 1072 |
| Pigs .. | .. | .. | .. | 91 |
| Lambs | .. | .. | .. | 21 |
| Total | .. | .. | .. | 1415 |

DISEASED OR UNSOUND FOOD DESTROYED.

TABLE G.

| DESCRIPTION OF ARTICLE. | | | NUMBER. | WHY DESTROYED. | |
|--|----|----|---------|----------------|--------------------|
| Livers of Bullocks or Cows, and parts of | | | 27 | .. | diseased |
| Lungs of Cows and Heifers | .. | .. | 2 | .. | do. |
| Lungs of Sheep | .. | .. | 25 | .. | do. |
| Livers of Sheep | .. | .. | 32 | .. | do. |
| Lungs of Pigs | .. | .. | 4 | .. | do. |
| Livers of Pigs | .. | .. | 2 | .. | do. |
| Carcases—Lambs | .. | .. | 2 | .. | unsound |
| Other organs | .. | .. | 29 | | diseased & unsound |
| Other foods | .. | .. | 3 | .. | unsound |
| Total | .. | .. | 126 | | |

FACTORY AND WORKSHOP ACT, 1901.

(TABLES H., I., J.)

A systematic inspection is made of the Factories and Workshops in the Borough, each place being inspected as found, and full details obtained as to the sanitary condition of each workshop. A register is kept showing the date of visit and time of limewashing, letters and notices served, and notices received from, and sent to, the Factory Inspector.

During the year, two hundred and ninety-five different premises have been visited, and four hundred and twenty work-

rooms inspected. One hundred and sixty re-visits have been paid where lime-washing or other repairs have been carried out. The appended Tables show the various items that have been dealt with.

Considering the small number of minor defects discovered, the workpeople of Torquay work under very favourable conditions, the majority of the workrooms being well lighted and ventilated and the surroundings clean.

Only two notices have been received from His Majesty's Inspector of Factories. One referred to the want of lime-washing of a laundry, and the other to the defective condition of a laundry floor. The former was immediately carried out on request, and in the latter case the place was closed, better premises being obtained elsewhere.

The only matter referred to the Factory Inspector was a complaint respecting the smell of gas in a Factory Laundry.

The names and addresses of seventy-four unregistered workshops were forwarded to the Factory Inspector, and sixty-three notices of occupation were received from him. The Factory Inspector was also notified of thirty workshops where the Factory and Workshop Abstract was not posted up.

Four complaints have been received respecting alleged nuisances at, or arising from, workshops.

Sixty-six letters, fifteen preliminary notices, and three legal notices were sent in connection with this work.

Considerable difficulty has again been experienced in obtaining the lists of outworkers. This necessarily entails a lot of correspondence and a waste of time in travelling over the same ground, as several visits have often to be made to the same locality to inspect the outworkers' premises, whereas if the lists were forwarded at the proper time only one journey would be necessary.

Thirty outworkers' names were received between February and March, and forty-six between August and November, who carry on work at forty different premises. The majority have been visited twice during the year, and were generally found clean and satisfactory.

The names and addresses of twelve outworkers have been forwarded to other Sanitary Authorities.

The Borough Water Engineer has been notified of seventy-three Laundry Workshops.

TABLE I.

| Number Re-visited. | Description of Trade. | Number inspected. | No. of workrooms or workplaces. |
|-----------------------|--|----------------------|--|
| 48 | Laundries | 49 | 95 |
| 2 | Dressmaker and Milliner | 33 | 44 |
| 5 | " " Outworkers | 7 | 7 |
| | Corset Maker | | |
| 4 | Tailor | 12 | 29 |
| 1 | " Outworkers | 19 | 21 |
| 8 | Bootmaker | 25 | 25 |
| 6 | " Outworkers | 7 | 7 |
| | Saddle and Harness Maker | 3 | 3 |
| | Sailmaker | | |
| 2 | Coachbuilder | 5 | 7 |
| 3 | Wheelwright | 5 | 5 |
| 19 | Shoeing Smith | 8 | 12 |
| 1 | Upholsterer and Cabinet Maker | 4 | 5 |
| | Blind Maker | 2 | 4 |
| | Umbrella and Trunk Maker | 1 | 1 |
| | Picture Framer | | |
| | Photographer | 3 | 7 |
| | Watchmaker and Jeweller | 5 | 4 |
| | Electro-plate Works | 1 | 3 |
| 1 | Printing Works | 4 | 5 |
| 2 | Dye Works | 1 | 2 |
| 5 | Cycle Works or Repairers | 4 | 5 |
| 8 | Plumber and Painter | 12 | 17 |
| 10 | Builders, Decorators, and Carpenters | 15 | 25 |
| 1 | Marble Mason | 7 | 8 |
| 4 | Quarries | 5 | 5 |
| 2 | Ironmonger and General Smith | 3 | 6 |
| 6 | Baker and Confectioner | 35 | 39 |
| 10 | Marine Store and Rag Sorter | 2 | |
| | Forage | 1 | 1 |
| 6 | Aerated Waters | 4 | 6 |
| | Pickles and Jams | 1 | 2 |
| | Bottle Washing | 2 | 4 |
| 2 | Engineers | 3 | 3 |
| | Dust Destructor | 1 | 3 |
| | Tentmakers | 1 | 2 |
| 1 | Bath-chair Makers | 1 | 2 |
| | Knitting | 1 | 1 |
| 1 | Pottery | 2 | 4 |
| 2 | Brewers | 1 | 2 |
| 160 | Totals | 295 | 420 |

TABLE J.

TOTAL NUMBER OF WORKSHOPS AND FACTORIES ON REGISTER.

| Description of Trade. | Number. |
|-------------------------------|---------|
| Laundries | 105 |
| Dressmaker and Milliner | 56 |
| " " Outworkers | 7 |

| | |
|---|-----|
| Corset Maker | 1 |
| Tailor | 25 |
| „ Outworkers | 19 |
| Bootmaker, including Outworkers' workshops .. | 36 |
| Saddle and Harness Maker | 4 |
| Sailmaker | 7 |
| Coachbuilder | 2 |
| Wheelwright | 9 |
| Shoeing Smith | 5 |
| Upholsterer and Cabinet Maker | 2 |
| Blind Maker | 1 |
| Umbrella and Trunk Maker | 3 |
| Picture Framer | 6 |
| Photographer | 1 |
| Watchmaker and Jeweller | 4 |
| Electro-plate Works | 1 |
| Printing Works | 7 |
| Dye Works | 15 |
| Cycle Works or Repairers | 20 |
| Plumber and Painter | 8 |
| Builders, Decorators, and Carpenters | 5 |
| Marble Mason | 1 |
| Quarries | 18 |
| Ironmonger and General Smith | 2 |
| Baker and Confectioner | 1 |
| Marine Store and Rag Sorter | 5 |
| Forage | 1 |
| Ærated Waters | 5 |
| Pickles and Jams | 1 |
| Bottle Washing | 2 |
| Engineers | 3 |
| Pottery | 2 |
| Brewers | 1 |
| Bath Chair | 1 |
| Dust Destructor | 1 |
| Knitting | 1 |
| Tentmakers | 1 |
| Total | 389 |

PROSECUTIONS.

| PREMISES. | OFFENCE. | RESULT. |
|---------------|-------------------------------------|--|
| Compton Place | Slaughtering on unlicensed premises | Defendant fined 6d. and 10s. costs |
| Victoria Park | Having sold diseased meat | Defendant fined £1 and £1 costs, or in default 14 days' imprisonment |

MISCELLANEOUS.

The temporary accommodation on the Race-course (the same provisions being made as in previous years) were visited each day during the races, and were generally found satisfactory.

The Public Elementary Schools were regularly visited and inspection made of the closets and urinals. In two instances it was found necessary to call the attention of the caretakers to the dirty condition of the water closets, and in one case to the want of lime-washing.

The public conveniences on Oddicombe Beach, Babbacombe Beach, Babbacombe Downs, Wellswood, and Manor Road have been frequently visited. One complaint was received of the dirty condition of the ladies' accommodation on Babbacombe Beach, and attention had to be called to the want of sufficient flushing of the urinal on the same Beach.

The carcase of a large dog was washed up on Babbacombe Beach during the summer, this was taken away and buried by the Coastguards.

A distance of two thousand and thirty miles has been cycled during the year. This gives a little idea of the travelling involved in carrying out the work of the department.

I am, Mr. Mayor and Gentlemen,

Your obedient servant,

GEORGE EDWARD BODY,

Cert. Royal San. Inst., &c.; Sanitary Inspector.



BOROUGH OF TORQUAY.



Meteorological Report

FOR THE YEAR 1910,

BY

FREDK. MARCH, F.R. Met. Soc.,

Borough Meteorologist.

The Borough Observatory,

February 1st, 1911,

Meteorological Report.

*To the Worshipful the Mayor, Aldermen, and Councillors
of the Borough of Torquay.*

GENTLEMEN,

I have to report that Meteorological readings have been continuously taken at two stations twice daily throughout the year—in the morning at 9 a.m. (local time), and in the evening between 4 and 6, according to the season.

The morning results have been posted each morning at the weather office and at several stations in the town. The evening readings have been widely diffused throughout the country. The cypher telegram to the Meteorological Office has been continued; this is distributed to various Press Agencies, and enjoys an almost unlimited circulation. A further telegram has been sent to an agency known as the Weather Bureau, seven days in the week, and supplies weather information to certain daily journals, including the London "Standard" and "Express," and some Sunday papers with wide circulations. A series of press telegrams has been sent to the following papers (to those marked with an asterisk in the summer only):—London "Daily Chronicle" *"Morning Leader," *"Daily News," "Liverpool Post," "Newcastle Chronicle," "Bristol Mercury," "Sheffield Independent," "Birmingham Post," "Manchester Guardian," "Bradford and Yorkshire Observer." This telegram has also been at the service of the "Western Morning News" and the "Western Daily Mercury," and copies have been sent by post for exhibition in special frames provided at 24 stations and receiving offices of the Great Western Railway.

Weekly reports have been sent to the Meteorological Office, to the "Torquay Directory," "Exeter Gazette," and London "Financial News." An extended weekly report has also been furnished to the "Manchester Courier."

The Monthly Report, as presented to the Council, has been posted at the town stations and published by the "Torquay Directory" and the "Western Morning News." A copy of this report has been used for occasional articles in the "Lancet," and Torquay has thus had its climatic advantages brought directly to the notice of the medical profession.

Special Monthly Reports have been made in accordance with their regulations to the Royal Meteorological Society and the Rainfall Organisation.

Many individual applications have been received and dealt with.

A visit of inspection was paid in August by Mr. Marriott, Assistant Secretary of the Royal Meteorological Society, who tested and approved the various instruments and sites.

A feeling being prevalent in the Borough, shared by some members of the Council, that a better sunshine record would be obtained from a recorder placed on a hill-station, the Sanitary Committee—in March—after careful enquiry and inspection of sites, arranged for a second instrument to be placed on the water-tower of St. Raphael's Home. Permission was courteously given by the Sister Superior. The cards from the two recorders have been carefully checked day by day and month by month, and at the end of a year a report will be furnished to the Council.

I am, Gentlemen,

Your obedient servant,

FREDERICK MARCH.

OBSERVATORY AND INSTRUMENTS.

The Observatory is organised and maintained by the Town Council, and is under the supervision of the Royal Meteorological Society and of the Meteorological Office.

The several Barometers, Thermometers, and Rain Gauges have been verified at Kew Observatory, and are regularly examined by a representative from the Royal Meteorological Society. Readings are all corrected for instrumental errors.

The Hygrometrical Results are deduced from the daily morning readings of the Dry and Wet Bulb Thermometers by means of Glaisher's Tables.

The averages for Sunshine are the result of 11 years', for Temperature and Rainfall of 34 years', and for Pressure of 26 years' observations.

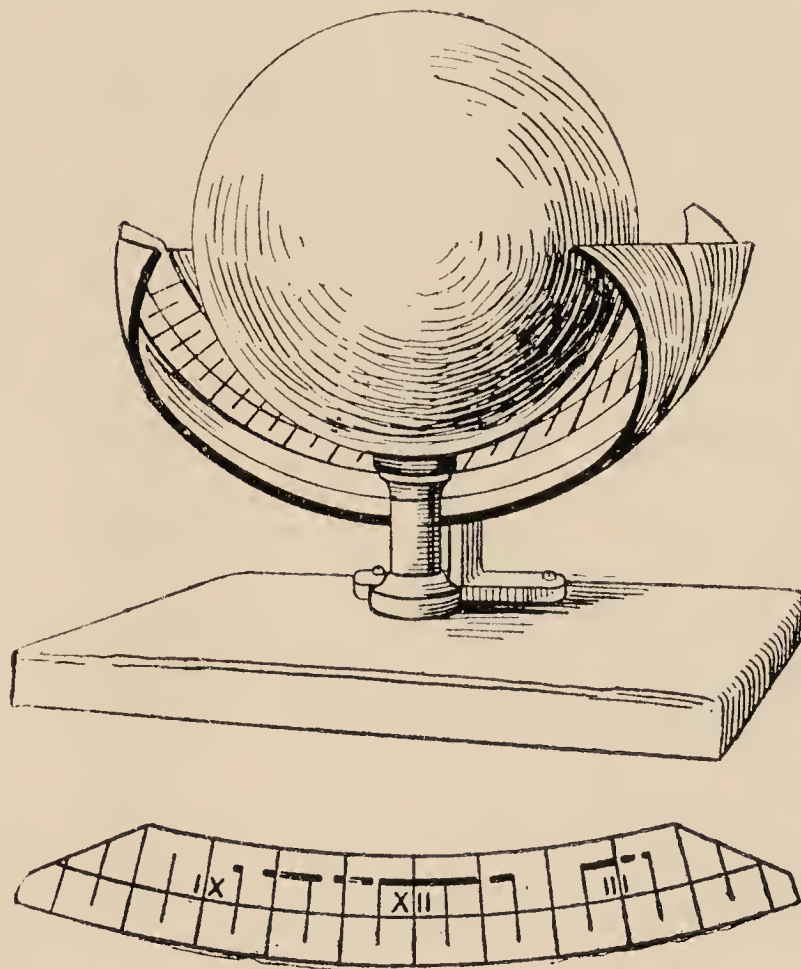
The following are the instruments and appliances in regular use, those marked with an asterisk being the property of the Torquay Natural History Society, and lent by them to the town:—

* The **Barometer** is a Fortin Standard, and is read twice daily, at 9 a.m. (local time) and at about 5 p.m. All readings are reduced to 32° F. and mean sea level, and are thus comparable with all readings similarly reduced.

* An **Aneroidograph**, by Richard Freres, gives in graphic manner the alternations of pressure.

There are two double louvred **Stevenson's Screens**, each containing **Dry** and **Wet Bulb**, and **Maximum** and **Minimum Thermometers**. The instruments are of standard make, and are so placed that the bulbs of the hygrometer are four feet above the level of the grass. One of these sets has been working throughout the year at Cary Green, where the published temperatures have been taken; the other in the Princess Gardens.

The **Rain Gauges** are of copper, by Casella, and of Snowdon pattern. They are placed, one on Cary Green, one in the Princess Gardens, with the upper edge 12 inches above the level of the ground.



A third ***Stevenson's Screen**, also double louvred has been in position in the Princess Gardens, and has held a ***Thermograph**, or Self-recording Thermometer, and an **Ozonometer**.

The **Grass Minimum** is by Hicks, and is placed on grass in the Princess Gardens about an inch above the ground.

The **Sunshine Recorder** (see illustration above) is placed upon the covered shelter at the southern end of the Pier deck, and is a Curtis' Improved Campbell-Stokes instrument fitted with a $3\frac{1}{2}$ -inch spherical lens of crown glass, working on the principle of the burning-glass.

SHADE TEMPERATURES

Taken at 9 a.m. (Local Time).

| 1910. | Maximum <i>mean.</i> | Minimum <i>mean.</i> | Max. & Min. <i>mean.</i> | Difference from Average. | Range <i>mean.</i> | Highest. | Date. | Lowest. | Date. |
|-----------|-------------------------|-------------------------|-----------------------------|--------------------------------|-----------------------|----------|-------------|---------|------------|
| | ° | ° | ° | ° | ° | ° | | ° | |
| Jan. ... | 47·0 | 37·4 | 42·2 | − 0·2 | 9·6 | 55·6 | 14th | 23·7 | 27th |
| Feb. ... | 50·2 | 39·8 | 45·0 | + 2·0 | 10·4 | 55·6 | 6th | 34·0 | 4th & 16th |
| March. | 51·8 | 39·9 | 45·9 | + 1·8 | 11·9 | 58·5 | 21st | 30·8 | 14th |
| April.. | 53·9 | 41·0 | 47·5 | − 0·7 | 12·9 | 64·1 | 21st | 33·0 | 1st |
| May ... | 60·8 | 47·4 | 54·1 | + 1·0 | 13·4 | 75·1 | 23rd | 35·6 | 9th |
| June... | 64·5 | 52·8 | 58·7 | + 0·2 | 11·7 | 72·9 | 12th | 47·2 | 4th |
| July ... | 64·6 | 53·6 | 59·1 | − 2·6 | 11·0 | 69·8 | 14th & 20th | 49·8 | 1st |
| Aug.... | 66·9 | 56·0 | 61·5 | − 0·1 | 13·9 | 73·5 | 13th | 51·9 | 31st |
| Sept. ... | 64·0 | 51·2 | 57·6 | − 0·6 | 12·8 | 69·6 | 2nd | 40·8 | 21st |
| Oct. ... | 58·9 | 50·3 | 54·6 | + 2·4 | 8·6 | 66·7 | 5th | 40·7 | 20th |
| Nov.... | 50·4 | 38·8 | 44·6 | − 2·9 | 11·6 | 55·1 | 23rd | 31·8 | 10th |
| Dec. ... | 50·7 | 42·6 | 46·7 | + 3·0 | 8·1 | 54·2 | 19th | 29·9 | 28th |
| Year | 57·0 | 45·9 | 51·5 | + 0·3 | 11·1 | 75·1 | May 23rd | 23·7 | Jan. 27th |

RAINFALL

In inches and hundredths.

| 1910. | | Total Amount. | Difference from Average. | Wet Days. | Mean Wet Day Rainfall. | Greatest fall in 24 hours. | Date |
|--------------|--------|------------------|--------------------------------|-----------|------------------------------|----------------------------------|-----------|
| January ... | *C. G. | 3·88 | + 0·68 | 21 | 0·18 | 0·95 | 27th |
| „ | †P. P. | 3·87 | | 21 | 0·18 | 0·94 | 27th |
| February ... | C. G. | 5·91 | + 3·27 | 27 | 0·22 | 0·83 | 14th |
| „ | P. P. | 5·94 | | 27 | 0·22 | 0·83 | 14th |
| March | C. G. | 0·86 | − 1·79 | 9 | 0·10 | 0·30 | 9th |
| „ | P. P. | 0·86 | | 9 | 0·10 | 0·30 | 9th |
| April | C. G. | 2·07 | − 0·27 | 16 | 0·13 | 0·40 | 12th |
| „ | P. P. | 2·08 | | 16 | 0·13 | 0·40 | 12th |
| May | C. G. | 2·19 | + 0·23 | 18 | 0·12 | 0·54 | 14th |
| „ | P. P. | 2·21 | | 18 | 0·12 | 0·54 | 14th |
| June | C. G. | 1·78 | − 0·39 | 17 | 0·10 | 0·54 | 9th |
| „ | P. P. | 1·78 | | 17 | 0·10 | 0·55 | 9th |
| July | C. G. | 2·40 | + 0·09 | 17 | 0·14 | 0·47 | 17th |
| „ | P. P. | 2·43 | | 17 | 0·14 | 0·48 | 17th |
| August | C. G. | 3·65 | + 1·03 | 20 | 0·18 | 1·08 | 28th |
| „ | P. P. | 3·63 | | 20 | 0·18 | 1·06 | 28th |
| September | C. G. | 0·17 | − 2·11 | 4 | 0·04 | 0·09 | 14th |
| „ | P. P. | 0·17 | | 4 | 0·04 | 0·09 | 14th |
| October ... | C. G. | 4·61 | + 0·53 | 21 | 0·22 | 1·42 | 27th |
| „ | P. P. | 4·61 | | 21 | 0·22 | 1·40 | 27th |
| November | C. G. | 4·59 | + 1·04 | 23 | 0·20 | 0·73 | 30th |
| „ | P. P. | 4·56 | | 23 | 0·20 | 0·74 | 30th |
| December | C. G. | 6·59 | + 2·81 | 23 | 0·29 | 0·93 | 8th |
| „ | P. P. | 6·60 | | 23 | 0·29 | 0·90 | 8th |
| Year | C. G. | 38·70 | + 5·12 | 216 | 0·18 | 1·42 | Oct. 27th |
| „ | P. P. | 38·74 | | 216 | 0·18 | 1·40 | Oct. 27th |

* Cary Green.

† Princess Pier.

HUMIDITY, CLOUD, OZONE, AND WIND.

| 1910. | HUMIDITY. | | | CLOUD <i>Cloud mean</i> 1 to 10. | OZONE. Percentage of possible. | | | WIND. Prevailing Quarters. |
|------------|---------------------------------|---------------------------------|-------------------------------------|--|--------------------------------------|--|--------------------------------------|--------------------------------------|
| | <i>Dry Bulb</i> <i>mean.</i> | <i>Wet Bulb</i> <i>mean.</i> | <i>Relative</i> <i>Humidity.</i> | | <i>Mean Daily</i> <i>Amount.</i> | <i>Greatest</i> <i>Daily</i> <i>Amount</i> | <i>Least Daily</i> <i>Amount.</i> | |
| | ° | ° | % | | % | % | % | |
| January | 41·6 | 39·8 | 86 | 7·0 | 57 | 90 | 20 | W. |
| February | 44·9 | 43·0 | 87 | 6·0 | 72 | 90 | 40 | W. |
| March ... | 46·0 | 42·9 | 77 | 4·0 | 54 | 70 | 20 | E. & N.W. |
| April ... | 48·9 | 44·9 | 73 | 5·5 | 55 | 80 | 10 | N.W. & W. |
| May | 55·3 | 50·6 | 71 | 6·0 | 57 | 80 | 35 | N.W. & E. |
| June..... | 59·3 | 55·6 | 77 | 7·0 | 51 | 70 | 30 | E. & W. |
| July | 60·0 | 55·8 | 75 | 7·0 | 50 | 70 | 20 | W. & N.W. |
| August... | 62·6 | 58·7 | 77 | 6·5 | 57 | 90 | 30 | W. |
| Sept. ... | 58·2 | 54·6 | 78 | 5·0 | 41 | 60 | 20 | E. |
| October | 54·8 | 52·6 | 85 | 7·5 | 46 | 70 | 20 | E. & N.W. |
| Nov. | 44·5 | 42·4 | 84 | 6·5 | 49 | 95 | 10 | N.W. |
| Dec. | 46·5 | 45·0 | 88 | 7·5 | 50 | 90 | 10 | W. & N.W. |
| Year... | 51·9 | 48·8 | 79 | 6·3 | 53 | 95 | 10 | W. |

BAROMETRIC PRESSURE

In inches and thousandths.

Reduced to 32° F. and Sea Level.

| 1910. | <i>Mean</i> of Month. | Difference from <i>Mean</i> of Month. | Highest Reading. | Lowest Reading. | Extreme Range of Pressure. |
|----------------|-----------------------------|---|---------------------|--------------------|----------------------------------|
| January | 29.917 | − 0.159 | 30.556 | 28.823 | 1.733 |
| February | 29.667 | − 0.341 | 30.285 | 28.963 | 1.322 |
| March | 30.151 | + 0.208 | 30.540 | 29.771 | 0.769 |
| April | 29.868 | − 0.027 | 30.437 | 29.066 | 1.371 |
| May | 29.899 | − 0.076 | 30.377 | 29.508 | 0.869 |
| June | 29.903 | − 0.110 | 30.373 | 29.505 | 0.868 |
| July | 29.902 | − 0.102 | 30.176 | 29.559 | 0.617 |
| August | 29.906 | − 0.071 | 30.324 | 29.515 | 0.809 |
| September | 30.273 | + 0.243 | 30.463 | 29.902 | 0.561 |
| October | 30.001 | + 0.055 | 30.586 | 29.704 | 0.882 |
| November | 29.707 | − 0.236 | 30.250 | 29.055 | 1.195 |
| December | 29.689 | − 0.273 | 30.527 | 28.753 | 1.774 |
| Year | 29.907 | − 0.060 | 30.586 | 28.753 | 1.833 |

DURATION OF BRIGHT SUNSHINE

In hours and tenths of an hour,

As recorded by the Campbell-Stokes' Standard Instrument.

| 1910. | Total Bright Sunshine. | Percentage Actual of Possible. | Difference from Average. | Greatest Amount in one day. | Date. | Percentage Actual of Possible. | Sunless Days. |
|--------------|------------------------------|--------------------------------------|--------------------------------|-----------------------------------|-----------|--------------------------------------|------------------|
| | Hours. | % | Hours. | Hours. | | % | |
| January ... | 67·3 | 26 | -- 0·3 | 7·6 | 22nd | 88 | 14 |
| February ... | 116·6 | 43 | + 24·0 | 9·2 | 27th | 87 | 4 |
| March | 197·3 | 55 | + 57·2 | 10·8 | 28th | 80 | 1 |
| April | 165·2 | 41 | — 16·3 | 12·8 | 26th | 90 | 2 |
| May | 216·7 | 46 | — 16·0 | 14·3 | 16th | 93 | 0 |
| June..... | 225·1 | 47 | + 8·4 | 14·0 | 14th | 86 | 2 |
| July..... | 181·8 | 38 | — 70·2 | 15·3 | 7th | 95 | 4 |
| August..... | 197·4 | 45 | — 31·7 | 12·8 | 19th | 91 | 2 |
| September.. | 174·1 | 42 | + 6·9 | 11·7 | 3rd | 87 | 0 |
| October ... | 79·7 | 25 | — 36·5 | 10·0 | 5th | 88 | 14 |
| November.. | 93·5 | 34 | + 10·9 | 8·0 | 9th | 87 | 7 |
| December .. | 56·2 | 24 | + 4·4 | 6·3 | 18th&22nd | 83 | 10 |
| Year... | 1770·9 | 40 | — 59·2 | 15·3 | July 7th | 95 | 60 |

BRIGHT SUNSHINE.

The total sunshine for 1910, though 68 hours below that of 1909, and 59 hours below the average, yet compares well in a dull year with that of the country generally. As will be seen from the appended table, no recognised station on the mainland can shew so good a result, while there was an advantage of 111 hours over the Scilly Isles, and of 32 hours over Jersey. Guernsey alone of British Stations can claim a higher total, her records being, at Brooklyn, 1773, and at Villa Carey, 1794 hours.

It cannot be too clearly stated that this table is compiled from the Annual Summary, issued by authority of the Meteorological Committee, and published for H.M. Government by Messrs. Wyman (9258r). For meteorological purposes, the British Isles are divided into districts; the highest value recorded in each district is here quoted, together with the average of that district, and such other totals as may prove of interest. It is in no sense a selection, but an unchallengeable comparison.

| ENGLAND, N.E. | | | | Western Part. | | | |
|-----------------------|----|----|------|-----------------------|----|----|------|
| District value | .. | .. | 1362 | Bath | .. | .. | 1578 |
| Skegness | .. | .. | 1504 | Cheltenham | .. | .. | 1431 |
| Whitby | .. | .. | 1399 | Buxton | .. | .. | 1423 |
| Scarborough | .. | .. | 1297 | Sheffield | .. | .. | 1264 |
| York | .. | .. | 1229 | ENGLAND, S.E. | | | |
| Newcastle | .. | .. | 933 | District value | .. | .. | 1529 |
| ENGLAND, E. | | | | Bognor | .. | .. | 1726 |
| District value | .. | .. | 1471 | Bournemouth | .. | .. | 1715 |
| Felixstowe | .. | .. | 1768 | Eastbourne | .. | .. | 1752 |
| Yarmouth | .. | .. | 1648 | Brighton | .. | .. | 1690 |
| Clacton | .. | .. | 1584 | Portsmouth | .. | .. | 1689 |
| Cambridge | .. | .. | 1501 | Hastings | .. | .. | 1719 |
| Hull | .. | .. | 1062 | Ramsgate | .. | .. | 1641 |
| MIDLAND COUNTIES. | | | | Margate | .. | .. | 1454 |
| District value | .. | .. | 1326 | Tunbridge Wells | .. | .. | 1543 |
| Eastern Part. | | | | Folkestone | .. | .. | 1727 |
| Belvoir Castle | .. | .. | 1456 | ENGLAND, N.W. | | | |
| Nottingham | .. | .. | 1285 | District value | .. | .. | 1442 |
| Harrogate | .. | .. | 1407 | Liverpool (Bedston | | | |
| Bradford | .. | .. | 1277 | Observatory) | | | 1585 |
| Birmingham | .. | .. | 1113 | Southport | .. | .. | 1570 |
| Huddersfield | .. | .. | 1196 | Manchester (City) | .. | | 982 |
| Oxford | .. | .. | 1376 | Blackpool | .. | .. | 1627 |

ENGLAND, S.W.

| | | | |
|----------------|----|----|------|
| District value | .. | .. | 1530 |
| Salcombe | .. | .. | 1745 |
| Falmouth | .. | .. | 1730 |
| Penzance | .. | .. | 1713 |
| Weymouth | .. | .. | 1695 |
| Torquay | .. | .. | 1771 |
| Plymouth | .. | .. | 1652 |
| Newquay | .. | .. | 1716 |
| Cardiff | .. | .. | 1600 |
| Clifton | .. | .. | 1472 |

ENGLISH CHANNEL.

| | | | |
|----------------|----|----|------|
| District value | .. | .. | 1731 |
| Jersey | .. | .. | 1739 |
| Guernsey | .. | .. | 1794 |
| Scilly | .. | .. | 1660 |

| | | | |
|--------------------------|----|----|------|
| LONDON —Greenwich | .. | .. | 1379 |
| „ Westminster | .. | .. | 1146 |

SCOTLAND, N.

| | | | |
|----------------|----|----|------|
| District value | .. | .. | 1179 |
| Castlebay | .. | .. | 1529 |
| Stornaway | .. | .. | 1383 |

SCOTLAND, E.

| | | | |
|----------------|----|----|------|
| District value | .. | .. | 1331 |
| Stonehaven | .. | .. | 1438 |
| Aberdeen | .. | .. | 1369 |

SCOTLAND, W.

| | | | |
|----------------|----|----|------|
| District value | .. | .. | 1360 |
| Oban | .. | .. | 1404 |
| Glasgow | .. | .. | 1044 |

| | | | |
|--------------------|----|----|------|
| DOUGLAS, I. of Man | .. | .. | 1667 |
|--------------------|----|----|------|

WALES, N.

| | | | |
|----------------|----|----|------|
| District value | .. | .. | 1442 |
| Llandudno | .. | .. | 1564 |
| Llaneuigrad | .. | .. | 1664 |

WALES, S.

| | | | |
|----------------|----|----|------|
| District value | .. | .. | 1530 |
| Pembroke | .. | .. | 1593 |

IRELAND, N.

| | | | |
|----------------|----|----|------|
| District value | .. | .. | 1292 |
| Armagh | .. | .. | 1323 |

IRELAND, S.

| | | | |
|----------------|----|----|------|
| District value | .. | .. | 1357 |
| Kingstown | .. | .. | 1531 |
| Dublin | .. | .. | 1433 |

METEOROLOGICAL ABSTRACT, 1910.

| | | | |
|---------------------------|-----|-----|--------|
| Highest Shade Temperature | ... | ... | 75°·1 |
| Lowest Shade Temperature | ... | ... | 23°·7 |
| Mean Maximum Temperature | ... | ... | 57°·0 |
| Mean Minimum Temperature | .. | ... | 45°·9 |
| Mean Temperature | ... | ... | 51°·5 |
| Mean Range of Temperature | ... | ... | 11°·1 |
| Total Rainfall | ... | ... | 38"·70 |
| Hours of Bright Sunshine | ... | ... | 1771 |
| Sunny Days | ... | ... | 305 |
| Mean Humidity | ... | ... | 79 |
| Mean Ozone | ... | ... | 53 % |

